

The Overview of the Ajinomoto Group

Fiscal Years 2009 - 2019

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Fiscal Years 2009 - 2019

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I

Food Business

1

The Outlines of Food Business

Ten years in the food products industry and business

In 2009, the global economy was suffering a recession following the 2008 financial crisis (the Lehman Shock), but from that point onward, it recovered rather smoothly due to the rise of China and other emerging countries. During this period, informatization and globalization advanced and there was a huge movement towards consideration of issues such as the environment and human rights, as represented by the SDGs. Within this circumstance, Japan was facing the unprecedented situation of population decline and the aging of society. In addition to this, factors the 2011 Great East Japan Earthquake had an impact and deflation continued for a time. From 2013, the economy began to improve, driven by Abenomics (a set of economic and monetary policies implemented by the Prime Minister Shinzo Abe), but sluggish personal consumption continued, meaning that the Japan food products market remained roughly level. Beside a succession of headwinds, the food products industry saw a rise in raw material prices, an increase in one and two-person households, shifts towards individualized diets and easy-to-cook meals, and stronger health-consciousness. In response to these trends, there was movement towards the creation of added value and overseas expansion.

Under the leadership of President & CEO Masatoshi Ito (2009-2015), the Ajinomoto Group's food products business adopted key principles such as "Specialty" (providing value that is not found in other companies' products), "Open & Link" (actively using external resources through M&A, alliances, etc.), and "expansion into adjacent domains" (leveraging brands and technology to develop in adjacent business areas), with the aim of digging deeper into domestic markets and achievement of rapid overseas business growth.

As a result, from FY2009 to FY2019, sales and profits changed as shown in Table I-1 below.

Sales in the Japan food products business decreased by a little over 10% due to factors that include the sale of Calpis Co., Ltd. in October 2012 and changes in accounting standards after the adoption of International Financial Reporting Standards (IFRS) in FY2016. However, profit grew by over 20%, showing a significant increase in profitability driven by measures such as the progress of structural reform and sales expansion through products in new business areas. Also, in the overseas food products business, although there was also a change in accounting standards, sales surpassed domestic sales in FY2013, and profit surpassed domestic profit in FY2014. As a result, we have been able to expand overall food products sales by over 200 billion yen and profit by over 30 billion yen.

Table I-1: Food products business results
(FY2009/FY2019)

(Billions of yen)

	FY2009		FY2019	
	Sales	Operating profit	Sales	Business profit
Japan	436	24.3	375.3	32.8
International Food Products	214.6	25.4	477.6	48.8
Total	650.6	49.7	852.9	81.7

Sources: IR Data Book 2020, INVESTOR'S GUIDE 2017

Japan consumer food products business

Our food products business in Japan consists of products including umami seasonings such as *AJI-NO-MOTO*®, Japanese flavor seasonings such as *HON-DASHI*®, *Cook Do*® and other menu-specific, mayonnaise, cup soups developed under the Knorr brand, coffee products by Ajinomoto AGF, Inc., and various frozen foods by Ajinomoto Frozen Foods Co., Inc., etc.

For basic seasonings products such as *AJI-NO-MOTO*®, *HON-DASHI*®, *Ajinomoto KK Consommé*, *Marudori Gara Soup*, and *Pure Select*®, we maintained firm sales by constantly improving the products, as well as implementing measures that include proposals for new uses and healthy recipes through TV commercials and informative websites, and launching new

products with reduced salt or reduced calories. Furthermore, in FY2012, we launched *Cook Do*® *Koumi Paste*® and *Cook Do*® *Kyo-no Ohzara*®, which added original new materials and technologies to our popular *Cook Do*® Chinese menu-specific seasoning brand. These products are good examples of expansion into adjacent domains in Chinese general seasonings and Japanese food seasonings and they made large contributions in terms of sales. In the same year, we launched *Nabe Cube*® which applied consommé technology for maintaining cube shapes and dissolving in liquid to Nabe (Japanese hotpot) seasonings.

For soups, we grew sales by developing new products and lifestyle proposals, such as the “made with cold milk” series that has stimulated in demand during summer since 2010, *Knorr*® *Soup DELI*® soups with plenty of ingredients launched in 2011, and the Warm Breakfast series campaign started in 2016. For our *Cook Do*® menu-specific seasonings, we also managed to win the support of consumers by appealing to their lifestyle and food needs, such as eating together with family and getting a balanced intake of protein and vegetables. This greatly grew sales and we maintained a leading market share and drove market expansion for both menu-specific seasonings and cup soups.

In the sweeteners business, we are centered on the high intensity sweetener aspartame. During this period, in order to reinforce the structure of the business, we sold Ajinomoto Sweeteners Europe S.A.S. and introduced new manufacturing methods. We also grew the consumer business which boasts the *PAL SWEET*® brand.

In April 2015, we made Ajinomoto General Foods, Inc., which was responsible for our coffee business, into a fully owned subsidiary and in July 2017, the company was reborn under the name of Ajinomoto AGF, Inc. We achieved growth through the stick type coffee business, which cultivated new markets through instant coffee developed with technology, and convenience store counter coffee business. However, the liquid coffee business, which had been supporting by consumers for many years, began to face severe competition. In order to respond to the diversification of consumer preferences, we have actively been launching new products such as individual portion and premium products.

In frozen foods, we continued to grow steadily with *Gyoza* (Japanese-style dumplings), originally launched in 1972, maintaining its leading share of the gyoza market through ongoing improvements (enabling preparation without water or oil, etc.). Similarly, in the Okazu field (side dishes that are usually served alongside rice), while there was an increase in competition for one of our major products, volume packs of *Yawaraka Wakadori Karaage* (fried chicken), we saw steady demand for natural thawing products such as lunch box series, including *Ebi Yose Fry* (shrimp fry), which led to firm growth. The rice products field was another major focus and it saw good sales of *The ★*® *CHA-HAN*, which attracted male consumers, *Gudakusan Ebi Pilaf* (shrimp pilaf), and *Gomoku Chahan*, which had been discontinued for a while but was brought back due to customer demand.

New products in each of these fields incorporated “deliciousness technologies” including ingredients that enhance *kokumi* and flavor, and ingredients that quickly tenderize raw materials.

J-OIL MILLS, INC. advanced activities with the aim of being an “Oishisa Design Company” that creates deliciousness which can move people with a focused pursuit of the



Blendy® Stick
Ice Café au Lait
Pack of seven



Blendy® Roasters &
Stick Colombian Blend
Pack of seven



Gyoza (Japanese-style dumplings)



Karaage no hi no abura
(oil for fried chicken)



Olive Oil Extra Virgin

various values possessed by edible oils (value for cooking, value for health, value for flavoring) and expansion of the possibilities of how edible oils can be used. It has maintained a top market share for olive oil, and it has stimulated the market even more by seeking health value through the sale of perilla and linseed oils. Also, in July 2018, it opened the “Oishisa Design Studio,” a multifunction presentation facility that will communicate new “Oishisa” (deliciousness) concepts to people inside and outside the company.

In regard to marketing, due to an emphasis on consumer’s viewpoint and advanced use of the internet, we got closer to consumers by adding digital communication to traditional mass advertising efforts, which included using social media and websites such as **Ajinomoto Park**, providing communications that focus on different life stages, implementing small-size marketing, promoting *Kachimeshi*® which provides athlete support foods to consumers, supporting dietary education that contributes to health promotion, and cooperating with government initiatives. We also unified advertising and PR messaging to further spread the AGB brand.

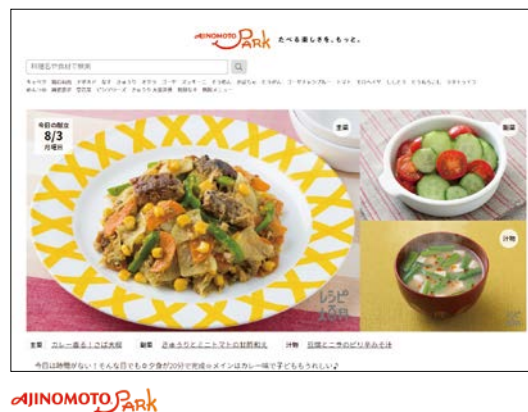
Also, on the R&D and production side, we began to concentrate together research and production locations that were scattered across Japan. The four companies responsible for our Japan food products business – Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., Knorr Foods Co., Ltd., and Ajinomoto AGF, Inc. – will concentrate their R&D functions in Kawasaki in 2020. Also, in regard to food product production, in 2019 we integrated our food product manufacturing departments at the Kawasaki and Tokai plants with Knorr Foods Co., Ltd. and Ajinomoto Packaging Inc. to form Ajinomoto Food Manufacturing Co., Ltd., and by 2021 the manufacturing and packaging of seasonings and packaged foods in Japan will be concentrated into three locations – Kawasaki City in Kanagawa Prefecture, Shimada City in Shizuoka Prefecture, and Yokkaichi City in Mie Prefecture. Initiatives are underway to produce even greater efficiency and synergies than ever before.

Overseas food products business

The overseas food products business was positioned as a growth driver in the FY2011-2013 and FY2014-2016 Medium-Term Management Plans. In addition to previous efforts focused on cash sales in traditional markets, we strengthened initiatives to engage modern trade markets and markets for eating out, while also building firm sales foundations through flavor seasonings and menu-specific seasonings tailored to local food preferences, particularly in the Five Stars (Thailand, the Philippines, Indonesia, Vietnam, and Brazil). In the Rising Stars (Africa, Turkey and the Middle East, Pakistan, Myanmar, India, etc.), where future growth was expected, we strived to achieve rapid market cultivation with a focus on the acquisition of or alliances with major local food companies. We also launched consumer foods businesses centered on frozen foods in North America and Europe.

In the Five Stars, our basic strategy was to expand seasonings businesses rooted in each region and develop new categories adapted to changes in eating habits and society due to urbanization. To expand seasonings businesses, we focused on sales growth for menu-specific seasonings and liquid seasonings as new mainstay products to follow umami seasonings and flavor seasonings. We increased sales of *Ros Dee*® Menu in Thailand; *CRISPY FRY*® and *Sarsaya*® in the Philippines; *Sajiku*®, *SAORI*®, and *Mayumi*® in Indonesia; *Aji-Quick*® in Vietnam; and *Satis!*® in Brazil. We also advanced the cultivation of markets that included powdered beverages (through products such as *Birdy*® 3in1 and *Birdy Maccha*® in Thailand and Vietnam, and *MID*® and *FIT*® in Brazil), and markets targeting food service and food manufacturing businesses.

We also responded to urbanization by striving to establish new categories and realize new sales channels and sales opportunities. We launched frozen food products that catered to demand for easy-to-prepare foods (Gyoza, frozen bread, etc.), developed and introduced products for food service and convenience stores, and expanded region of sales of instant noodles (*Yum Yum*®, etc.). Through these initiatives, we continuously achieved annual sales growth of around 10% in



the Five Stars, driving the growth of the Group.

Furthermore, we realized the growth of consumer businesses in the advanced regions North America and Europe through methods such as M&A. In the U.S., in 2014 we acquired Windsor Quality Holdings, LP (headquarters: Houston, Texas) for around 84 billion yen. In Europe, in 2013 we established a new plant in Poland through a joint venture with Jawo sp. z o.o., and in 2017 we acquired France-based Labeyrie Traiteur Surgelés S.A.S. (LTS, headquarters: Le Neubourg) for around 3.6 billion yen. Windsor Quality Holdings, LP boasted a top share of the market for frozen Asian foods in the U.S., while LTS focused on products such as desserts and aperitifs. By using both companies' sales networks to sell our frozen food products, which include *Gyoza* and fried rice, we tried to accelerate business growth.

We also put an emphasis on speed for the cultivation of the Rising Stars. In Africa, we worked to accelerate growth centered around WEST AFRICAN SEASONING COMPANY LIMITED (WASCO), which had been established in Nigeria in 1991, by establishing Ajinomoto Foods Egypt S.A.E. in 2011 and AJINOMOTO AFRIQUE DE L'OUEST S.A. in Cote d'Ivoire in 2013. Following this in 2016, we acquired a 33.33% share in Promasidor Holdings Limited, a major packaged food products manufacturer that had developed businesses in 36 African countries, and advanced a strategy by leveraging Promasidor's sales network. In Turkey, we established Ajinomoto Istanbul Food Sale Ltd. in 2011 and in 2013, we acquired a 50% share in Kükre A.Ş., a local manufacturer of premium brand food products, and made it into a subsidiary. From 2016 to 2017, we continued to steadily build a business foundation by acquiring Örgen Gıda Sanayi ve Ticaret A.Ş., thereby acquiring its bouillon, dry soup, menu-specific seasonings, and powdered dessert businesses and brands, and we made Kükre A.Ş. into a fully owned subsidiary. In 2018, Kükre A.Ş., Örgen Gıda Sanayi ve Ticaret A.Ş., and Ajinomoto Istanbul Food Sales Ltd. were amalgamated to form Ajinomoto Istanbul Food Industry and Trade Limited Company (headquarters: Istanbul) in order to expand business within Turkey and realize exports to the Middle East to expand the scale of business to a sales of around 10 billion yen as early as possible. During this period, in 2016 we also established a joint venture company with the Lakson Group in Pakistan and reopened a local subsidiary in Myanmar, creating a foundation for long-term, sustainable growth in both countries.



Ros Dee® Menu



CRISPY FRY®



Sajiku®



Aji-Quick®



Birdy® 3in1

Strengthening BtoBtoC business targeting food service chains and packaged food product manufacturers in Japan and overseas

With regard to the development of our food products business over these 10 years, we also strengthened our commercial use business (BtoBtoC) targeting food service chains and packaged food product manufacturers, representing a significant deviation from our history, which focused on consumer markets. In addition to changes in eating habits in Japan and overseas, the Specialty policy led by President & CEO Masatoshi Ito (2009-2015) also effectively differentiated our products in the commercial market, where evaluations are made by discerning professionals.

In the market for the food service industry in Japan, sluggish consumption had resulted in a fairly consistent downward trend from its peak in 1997 to 2011, but from 2012 onward, it finally began to expand again due to a recovery in economic conditions and an increase in inbound demand. On the other hand, the markets for ready-made meals (premade side dishes, lunch boxes, bread products, etc.) and packaged food products (frozen and chilled precooked food products, processed livestock vegetable and marine products, desserts and sweets, noodles, beverages, etc.) had been expanding fairly consistently. The business environment continued to be generally

favorable in overseas markets as well. This was boosted by further depth and cultivation in our overseas food businesses in the Five Stars and Rising Stars and the establishment of foundations in North American and Europe through M&A focused on frozen food business.

Within this, products that include *Tencho* (savory seasonings) for industrial use and enzyme preparations that enhance texture and physical properties such as *ACTIVA*® were affected by food service trends in Japan to a certain extent, so we enhanced our product lineup and strengthened our relationships with major customers, and we increased overseas sales as well as in Japan. The market for ready-made meals in particular was growing, so we deepened our engagement with major convenience store chains and realized many applications for our products including *Tencho* (savory seasonings), enzymes, and mayonnaise in mainstay convenience store products, such as oden broth and rice balls.

Based on these developments, in April 2018, we amalgamated our business that ready-made meal and food service and our *Tencho* (savory seasonings), enzymes, MSG, and nucleic acids business targeted packaged food product manufacturers to establish the Solution & Ingredients (S&I) Department. This department utilizes “deliciousness technologies” to actively grow our “integrated food solutions business” for packaged food manufacturers, food service and ready-made meal customers.

Using digital technology to create new businesses and making existing businesses more advanced

The advancement of digital technology has made it possible to obtain and utilize huge volumes of digital data related to consumer awareness and behavior. In light of this, we established the Consumer Data Analysis & Business Creation Department under the Food Products Division in April 2018. This department gathers and analyzes data related to every aspect of consumer awareness and behavior and increases resolution by getting closer to consumers. Using these data, the department promotes cross-sectional initiatives such as “creating new products, services, and businesses that go beyond the scope of existing businesses,” and “making existing businesses more advanced and efficient by promoting digitalization” on a Group-wide basis, and its initiatives are making a major contribution to strengthening the growth potential of the entire Group.



Okome Fukkura
Choriryo



Cook Do®
Shirunashi Tantanmen

savorboost™
savorboost™

コクミドル®
〈スイーツ濃厚感〉

Kokumidoru®
(for richer sweets)

2

The Consumer Food Business in Japan

(1) The business environment and market trends

The global and Japanese economies

In the decade after 2009, emerging countries and others played a leading role in the global economy's recovery during the global recession that followed the 2008 financial crisis (the Lehman Shock, Autumn 2008), and it remained mostly stable as a result. During this period, globalization and information technology advanced further, the presence of emerging countries such as China grew more significant, and the influence of internet-related companies such as Google, Amazon, Facebook, and Apple (GAFA) grew stronger as well. Moreover, as symbolized by the United Nations SDGs, consideration of the environment and human rights became a prerequisite for corporate activities.

The Japanese economy was forced to retract due to the 2011 Great East Japan Earthquake, the floods in Thailand, and the European financial crisis, and it suffered from long-term stagnation that has been termed the "Lost 20 years." The second Cabinet of Shinzo Abe, formed in December 2012, rolled out bold economic policies (*Abenomics*) such as monetary easing to break through the stagnation. This resulted in a rise in stock prices and improved corporate performance, but on the other hand, real wage growth slowed due to an increase in non-regular workers. In addition, Japan's population began to decline in 2008, and the consumption tax increase (from 5% to 8%) in April 2014 along with the aging of the population led to a diminished appetite for consumption.

Japanese companies decided to concentrate on the cultivation of emerging markets and the provision of new value in their products and services, which included measures to address the shrinking market in Japan, while complying with global management standards (ESG, the emphasis on shareholders, utilization of human resources, etc.).

Changes in food and the food products industry

In the food industry, which had thus far been resistant to the impact of economic fluctuations, it became even more important to create products and services in anticipation of changes in both lifestyles and distribution as the market in Japan continued to shrink.

In terms of eating habit trends, the proportion of single-person and two-person households increased against the backdrop of the declining birthrate and aging population, and there was a shift towards individualized diets and easy-to-cook meals. In addition, food-related needs became more diversified, as seen in the co-existence of two mindsets: a money-saving mindset characterized by a desire for low prices influenced by the long recession along with a return to eating at home, which includes ready-made meals; and a mindset characterized by a willingness to splurge on products whose value is apparent, as reflected in the desire for healthy, safe, and authentic products as well as the popularity of "small luxury" products. There was also growth in private brands (PBs) and online sales, and the influence of social networking services expanded, which required companies to constantly re-invent their marketing.

Furthermore, as seen in the enactment of the Basic Act on Shokuiku (Food and Nutrition Education) in June 2005, it became increasingly important to convey accurate knowledge about ingredients and foods to children to deal with irregular eating habits and preserve Japanese food culture. Expectations also rose for initiatives by food companies that contribute to resolving food-related social issues, such as addressing food loss and waste, which resulted from large

amounts of food being discarded due to unsold food, leftovers, expired food, and so on.

(2) New product development and marketing activities for the consumer food business

To “walk in our customers’ shoes”

As of 2009, sales in the Japan consumer food business remained sluggish due to the 2008 financial crisis (the Lehman Shock) and other factors. An increase in operating profit was secured through the reduction of costs and improvements in the GP (gross profit) rate due to improved factory productivity.

In the FY2011-2013 Medium-Term Management Plan, the basic policy was “to create businesses that generate unique ‘consumer value’ from the same perspective as consumers around the world.” In other words, the basis of our business strategy was to resolve the issues in Japanese eating habits indicated in “Changes in food and the food products industry” (see p.7).

This is reflected in our mission, which includes:

“products and services with original value,”

“the joy of handmade meals,”

“a new type of deliciousness,”

“the enjoyment of food and healthy menu items,”

and “families smiling as they spend time together.”

This policy continues today.

Moreover, as the core business of the Ajinomoto Group, we aimed to steadily expand profits even amid the contraction of the consumer food products market due to the declining birthrate. To make this mission and profit plan a reality, we aimed to create fans through product awareness and increase contact points with customers throughout the Group, followed by the attainment of a mind share¹ of 50% and the creation of strong relationships with consumers (generating fans) to become the No. 1 must-have food brand, all while strengthening our defensive measures through cost reductions and improved efficiency in our organization and supply chain management (SCM).

Shift to consumer-oriented and change-prediction research

In the consumer food business, in order to achieve the consumer-oriented approach that was consistently advocated from 2009 to 2019, consumer (market) research changed as well.

At the end of the 2000s, the food products market in Japan began to change significantly due to the aging population, the increase in single-person households, and the polarization of consumption (widening income disparities, daily savings, high consumption on anniversaries, etc.). Purchase locations became more diverse, and they encompassed not only general merchandise stores, but also convenience stores (CVS), drug stores, and online, and environmental friendliness, safety, and security became important factors for product selection. Social issues such as food loss and waste, elderly and middle-aged health issues, and irregular eating habits by young people became more serious.

In response to these changes, demographic analysis (demographic attributes included gender, age, area of residence, income, occupation, educational background, etc.) revealed the following:

- As the number of brands purchased per company increases, the number of purchases per brand also increases
- Brand loyalty is strengthened through continuous use of seasonings, and usage tends to expand

As the changes became more complex, the market could no longer be predicted only by these demographic analyses and reviews of historical data. In addition to research that delves into the lifestyles, behaviors, and mindsets of consumers and refinement of small-size marketing² and target setting (wealthy housewives with children, housewives raising children in double-income households, etc.), it became essential to use backcasting methods to predict signs of change based on facts, envision the future, and work backwards to formulate a strategy.

1. This is indicated by the name recognition share, which includes foremost name recognition rate and pure recall rate (the order and ratio of company names given as answers to the question “when someone asks you to name a food company, what comes to mind?”), and the purchase intention rate and image score share.

2. Marketing that targets a group of a certain scale (small-size) that is centered on fans and others who form a community and actively communicate.

The evolution of communication with consumers

When it comes to adopting a consumer-oriented perspective and creating fans, fine-tuning communication with consumers is also important. We worked hard to make new attempts at this given the increased presence of the web and social media during this time due to the establishment of the internet (which had a penetration rate of 93% in FY2016).

The community site **AJINOMOTO Park**, which launched in July 2012, aimed to build a customer base (platform) of 5 million people as a central location for direct communication with consumers based on a cross-brand concept. The recipe site “*Recipe Daihyakka*,” which serves as the core, is equipped with a recipe recommendation function based on registered members’ search histories, the first of its kind in Japan, in addition to the ability to search by cooking method or situation. We also added content such as “sharing meals,” “employee tweet relay,” and “campaigns,” which expanded points of contact and communication channels with consumers. It has become a place where we put platform-based marketing into practice through proposals for our products aimed at consumers for various situations and concerns, as well as a place for co-creation that gets consumers involved in the development of products and recipes.

With regard to fan creations, we also focused on Integrated Marketing Communication (IMC) to improve the image of the Group by making our message on the website, in television commercials, and other outlets as unified and consistent as possible.

In addition, we have actively pursued new initiatives that are centered on lifestyle changes such as living alone, marriage, or childbirth, as demonstrated by the sale of 1.5 million starter kits (*Gyoza* and drinks), recipe books and mobile websites that support young moms, and so on.



AJINOMOTO Park “PARK MAGAZINE”

Expanded utilization of IT

Utilization of IT is indispensable for performing detailed surveys, information analysis, and communication in regard to the diversification of consumers and eating habits.

In terms of communication, the aforementioned **AJINOMOTO Park** was the biggest starting point, but the site’s communication functions gradually shifted to social media afterwards, which turned it into an optimal source of information for consumers. Besides working hard to develop our own online shopping service, we have also made active use of consumer-oriented and business-oriented online shopping, such as Amazon and LOHACO, as a new sales channel.

Meanwhile, social media has been positioned as a source of information, and we have set up official accounts on Twitter, Facebook, Instagram, Pinterest, LINE, and YouTube and make active use of them.

For information collection and analysis, in addition to POS and demographic data analysis, we have established a system for the integration and central management of internal Group data, which was previously kept separately, and made it into a Digital Marketing Platform (DMP). We utilized this to launch small-size marketing and maximize the number of customers multiplied by Lifetime Value (LTV), the value provided to customers over the course of a lifetime. Moreover, sales forecasts for demand and new products and measurements of advertising effectiveness became more precise, including the introduction of the new SCM system, which helped reduce waste loss and improve the efficiency of advertising investments.

In April 2018, the Consumer Data Analysis & Business Creation Department was newly established to utilize the big data that we accumulated through these various utilizations of IT, and further evolution in marketing is expected (see p.49).

Existing products and expansion into adjacent domains

The product strategy for consumer foods rested upon the following two pillars:

- A) Rebuilding existing products
- B) Launching new products through expansion into adjacent domains

Our effort to rebuild existing products referred to in A) took into account the improvement of loyalty towards seasonings (use of one’s favorite seasonings for various purposes; see p.8), intensifying competition with competing products and PB products, and changes in the market,

and we re-designed and strengthened the value of our long-selling consumer food products.

With regard to *AJI-NO-MOTO*®, *HON-DASHI*®, and *Ajinomoto KK Consommé*, we advertised their value as means to support consumption of delicious vegetables for health-related reasons, and we strengthened our recommendations of recipes such as *Dashi-ni* (boiled vegetables in broth) and soup vegetables. In addition, through an improved product lineup for small households and elderly people as well as improved resistance to humidity, we provided value that is compatible with the values of consumers. In particular, for *Knorr*® *Cup Soup*, its value as a breakfast option was conveyed through descriptions such as a *Soup “Tsuke Pan/Pita Pan”* (dipping bread in soup), *Onchosyoku*® (warm breakfast), and so on. Proposals for new eating methods and product value that fit various life situations expanded the market and contributed to improved profits for the Japan consumer food business.

With a focus on major brands such as *HON-DASHI*®, *Knorr*®, *Pure Select*® (mayonnaise) and *Cook Do*®, we have concentrated on expansion of the value provided, and we have also striven to expand profits through reorganization of value chains, such as with the MORE Project (see “History” p.60).

With regard to the new product development referred to in B), in addition to the creation of the world’s best seasoning technology through R&D, the concept of expansion into adjacent domains was set forth in the FY2014-2016 Medium-Term Management Plan. We launched products that offer new value based on the viewpoint of consumers as a way to expand into surrounding areas through a utilization of existing resources (brands, etc.).

Cook Do® *Kyo-no Ohzara*® (launched in advance in the Tokyo metropolitan area in August 2012; launched nationwide in February 2013), which was developed to expand the “*Cook Do*®” Chinese menu-specific seasoning brand beyond Chinese dishes, succeeded in developing a new market by responding to the need for menu-specific seasonings similar to *Cook Do*® for Japanese and Western-style dishes. Given the increase in the number of busy housewives in double-income households, the desire to save money, and the increase in the number of elderly and single-person households, this product responded to changes in dining situations, which included meals that consist of rice, soup, and main dish, as well as an increase in “single plate” meals (main dishes, side dishes, and staples all on a single plate).



Gu-tappuri Miso Soup Nasu (eggplant)



Knorr® *Cup Soup Potage*



Knorr® *Cup Soup Tomato Potage*



Cook Do® *Kyo-no Ohzara*® *Buta Bara Nasu* (pork back rib and eggplant)



Cook Do® *Kyo-no Ohzara*® *Niku Miso Kyabetsu* (cabbage with minced meat and miso paste)



Steam Me Buta Chashu (barbecued pork)

Furthermore, according to in-depth surveys that delved into consumer insights with regard to eating at home:

- ・ Quantitative changes: Decrease in meal amounts per household/meal, decrease in opportunities to eat at home (shift to ready-made meals, food service, and frozen foods), increase in demand for snacks/light meals/between-meal snacks
- ・ Qualitative changes: Increased prevalence of menu-specific seasonings, shift from family meals to “For me, for two.” (meals for just oneself and one’s partner), fewer items per meal, shift from miso soup to soup and tea-type beverages

The survey revealed that the aforementioned changes were occurring and that there was a deep-

seated anxiety about a lack of vegetables. In the FY2014-2016 Medium-Term Management Plan, we sought to cultivate the market through new products and strengthened product lineups for existing series that meet these needs.

In the FY2017-2019 Medium-Term Management Plan, our solution-providing approach, which takes health consciousness and nutritional balance into account, assisted significantly in the development of peripheral markets.

Responding to changes in food and foodstuff purchasing situations

General merchandise stores (GMS) had been the main locations for food and foodstuff purchases ever since Japan's period of rapid economic growth after World War II, but mass purchasing and mass sales were the norm, and in some ways they were unable to respond to the diversification in consumer needs. Food-specific supermarkets, CVS, and drug stores gained momentum in their place. In addition, online shopping has grown in popularity against the backdrop of an increase in double-income and single-person households and the expansion of the health food market. Online shopping aimed at offices also turned into a new sales channel for beverages and sweets. The spread of online sales has also promoted the creation of omni-channel retailing, which links and integrates sales and management between the internet and physical stores.

Naturally, in product development and marketing for the consumer food business, soups and *Dashi* (Japanese soup stocks) for CVS (exclusive) and online order (with high-grade feel and health-consciousness as selling points) were developed in response to these new channels.

In terms of sales promotion activities, new initiatives began in cooperation with the government's efforts towards health maintenance and promotion of health, which included sales of products with functions that addressed lack of vegetables, metabolic syndrome, and reduced salt content.

(3) New product development for seasonings and packaged foods

Seasoning lineups that helped to address health issues

The biggest social issue that we aim to help solve through The Ajinomoto Group Creating Shared Value (ASV; see "History" p.39, p.63) is the health problems faced by people around the world. There are 800 million people throughout the world who are hungry or chronically under-nourished, while 2.2 billion are over-nourished (as of 2015). In Japan, the increase in the population of those aged 65 and over is accelerating, and the extension of healthy life expectancy is a major issue.

In response to these trends, we positioned various seasonings as solutions to these issues, increased the value that our products offer, and reorganized our businesses through proposals for new uses and updates based on the trends and preferences of the times.

Our basic policy was to make the basic seasoning products *AJI-NO-MOTO*®, *Seto no Honjio*®, and *Aji-Shio*®, and the flavor seasonings *HON-DASHI*®, *Ajinomoto KK Consommé*, *Ajinomoto KK Marudori Gara Soup*, and others more useful for creating menus and cooking and contribute to the improvement of people's health.

AJI-NO-MOTO® used *AjiPanda*®, which appeared in 2005 on the occasion of our 100th anniversary, as a PR character while proposing new uses and emphasizing safety. In terms of applications, we proposed ways to use the seasonings outside of Japanese dishes, such as in fried rice, peperoncino, and various stir-fried foods. In terms of security, factory tours and videos on the website convey our manufacturing methods and consideration of environmental preservation.

Seto no Honjio®, launched in 1988, conveyed the appeal of using salted pickles for cooking, and it emphasized that it used Japanese coarse salt made exclusively from seawater in Okayama, Japan.

Through the use of *Aji-Shio*® for rice balls, fried foods, and salads, we emphasized the merits of combining salt and umami ingredients, and in February 2017, we made a large-sized 650g product available for heavy users.

Reducing the sodium content in flavor seasonings

The flavor seasonings *HON-DASHI*®, *Ajinomoto KK Consommé*, and *Ajinomoto KK Marudori Gara Soup* addressed the increasingly serious problem of excess salt intake. The average daily salt intake among Japanese people was 12g for men and 10g for women as of 2006, which greatly exceeded the target values (10g for men and 8g for women)³ set by the Ministry of Health, Labour and Welfare. In addition, seasonings that include soy sauce, miso, and salt accounted for about 60% of salt intake.

In response to this situation, in August 2009, we launched three reduced-salt varieties. The manufacturing made use of our original technology⁴ to create the healthy salt *YASASHIO*®. *YASASHIO*® subsequently improved the quality of its taste in February 2018, and *HON-DASHI*® reduced its salt content twice after 2015, achieving a salt formulation of zero in February 2018. *Marudori Gara Soup* reduced its salt content in August 2018, and *Ajinomoto KK Consommé* did the same in February 2019.

Moreover, *HON-DASHI*® expanded its lineup through the launch of higher-grade products such as *Yakiago-dashi* (August 2016) and *Dashi* pack *Noko-dashi* (February 2019). With regard to proposals for usage, we began the *HON-DASHI*® utilization technique campaign in February 2009 and the “*Uchi no Miso Soup Support Project*” in May 2018 to promote demand for miso soup and increase opportunities for its consumption.

3. Afterwards, salt intake gradually decreased, but the daily intake recommended by the World Health Organization (WHO) is 5g per day, while the target intake recommended by the Ministry of Health, Labour and Welfare was reduced to 8g for men and 7g for women in 2015 (revised to 7.5g for men and 6.5g for women in 2020).
4. Amino acid technology is employed, with the amount of sodium chloride halved and potassium salt added instead, and γ-PGA (polyglutamic acid) used to suppress the bitterness of the latter.



Ajinomoto KK Marudori Gara Soup 40% less salt



HON-DASHI® 60% less salt



Ajinomoto KK Consommé 40% less salt

Updating seasoning packages to be more eco-friendly

We constantly improved the packaging of seasoning products as a concrete measure aimed at business management in pursuit of sustainable production and consumption, remaining mindful of the impact of our business activities on the global environment.

For *AJI-NO-MOTO*®, in February 2013, we introduced caps and shrink films for bottled products that use plant-derived materials. As a result, we attained our goal of “All Eco,” which aims to reduce the environmental burden of all of our packaging materials along with glass, which has a high recycling rate.

For *HON-DASHI*®, in response to the change in volume from January 2014, we reduced the amount of packaging materials used, reduced the number of inner bags, and changed the cap material for bottled products, and we improved the expiration date display afterwards. The packaging for *Ajinomoto KK Consommé* was updated in August 2016, and the packaging for large-volume varieties was simplified. For *Pure Select*®, in addition to the quality improvement in February 2018, bottles made from plant-derived materials started to be used, and they were made 5% lighter (60tons less plastic per year).

Cook Do® *Kyo-no Ohzara*® for Japanese and Western-style dishes

Changes in social conditions, which included an increase in the number of elderly/single-person households and an increase in double-income households, had a great impact on dining within families, and demands related to daily meals have diversified. In double-income households, recipes that can be made quickly and easily have become more useful, and a preference for single-plate rice dishes arose. This was true for single-person households as well. In addition, households with elderly residents needed meals that could provide sufficient nutrition from a

Figure I-1: Aji-na Eco



What is “Aji-na Eco”?

This refers to products and information provided by the Group that are considered “typical to the Ajinomoto Group and smart Aji-na in Japanese” and “ecological (= Eco).” The mark conveys the greenery of the Earth and the joy of eating, and a global environment made even better through food.

small number of items.

We expanded the categories available within the “Cook Do®” brand, which was established in 1978 as a combined seasoning for Chinese cuisine. *Cook Do® Kyo-no Ohzara®*, which allows Japanese and Western-style meat and vegetable dishes to be prepared with just a little effort, was given an advance launch in the Tokyo metropolitan area in August 2012 before its nationwide launch in February 2013.

During development of this product, we were particularly mindful about major lifestyle changes for housewives. In response to the expectations housewives have for menu-specific seasonings, which are “providing a taste that you cannot provide yourself,” “serving as a side dish for rice,” and “serving as a main dish” (according to a 2011 Ajinomoto Co., Inc. survey), we decided to offer proposals for Japanese and Western-style dishes that use menu-specific seasonings.

The lineup began with four varieties that can be made in 10 minutes: the boiled dishes *Buta Bara Daikon* (pork back rib and radish) and *Shiodori Jaga* (salt-base chicken and potato), and the stir-fried dishes *Garibata Chicken* (chicken with garlic and butter) and *Gyu Eringi* (beef and elingi mushroom), which can be made in a single frying pan. Along with these new releases, we invested in a large number of TV commercials in the second half of FY2012, and we strove to have the advertisements be expressed in a way that would make people want to try these dishes. Since then, the *Cook Do® Kyo-no Ohzara®* series has expanded to include *Buta Bara Hakusai*, *Ajishimi Niku Tofu*, *Toriniku to Tamanegi no Amazuan*, *Niku Miso Daikon*, *Toriniku to Nasu no Amazuitame*, *Toro Tamago Buta Cabbage*, *Buta Bara Piman*, *Toriteba Jaga*, and *Niku Soboro Tofu*.

Cook Do® Kyo-no Ohzara® became a representative example of our strategy of expansion into adjacent domains (see p.10 and “History” p.17).

***Nabe Cube®*, expanding consommé technology to Japanese food**

Nabe Cube® is another example of our success at expansion into adjacent domains in that the consommé technology we have cultivated was applied to *Nabe* (Japanese hotpot) dishes.

Nabe (Japanese hotpot) dishes were highly popular due to their fulfillment of the two ideals for daily meals, namely, meals that allow one to eat a lot of vegetables in light of the increase in health consciousness, and meals that require less effort to cook given lifestyle changes and an increase in double-income families. Because of the increase in the number of meals in which family members eat separately in accordance with their daily schedule, hotpot dishes were highly regarded even among households who consciously tried to create situations where the whole family gathered around the table. Originally, hotpot dishes were more common in the autumn and winter seasons in many households.

While the hotpot seasonings contained in retort pouches and bottles that had been released thus far were widely used, there were issues with these products in that they were expensive, made it difficult to adjust measurements, and were difficult to carry. Based on this feedback from consumers, we released *Nabe Cube®*, which condenses the taste of hotpot soup into a cube shape,



Cook Do® Kyo-no Ohzara®
Niku Soboro Tofu
(soybean curd with minced meat)



Cook Do® Kyo-no Ohzara®
Buta Bara Piman
(pork back rib and pimento)



Nabe Cube®
Yosenabe Shoyu



Nabe Cube®
Tai to Hotate no
Kiwami-dashi Nabe



Nabe Cube®
Yasai-dashi Nabe



Nabe Cube®
Umakara Kimchi

in August 2012. The lineup included *Tori-dashi Uma-shio*, which is a well-balanced combination of flavorful chicken broth and rich chicken oil; *Pirikara Kimchi*, which has a chicken broth base accented by the richness of kimchi and red miso; and *Yose Nabe Shoyu*, which contains a double-stock-type soup stock with chicken broth and scallops.

Toss Sala®: A different cooking style and result than usual

We have responded to the diversification of women's lifestyles and the accompanying changes in household needs with a variety of products. One of these is *Toss Sala*®, a seasoning for salads with toppings. Ever since the ratio of full-time housewives to double-income households in Japan reversed in 1997, the number of double-income households has continued to increase. Compared to full-time housewives, more housewives in double-income households wanted to provide their families with attractive-looking meals, even though they did not have much time to cook (according to a 2012 Ajinomoto Co., Inc. survey). In addition, double-income families tend to feel that they lack vegetables in their daily diet, and in response to these survey results, we worked to develop seasonings that allows a variety of vegetables to be prepared easily and in an attractive fashion. Thus, *Toss Sala*® was launched in August 2014 (an advance release in the Tokyo metropolitan area in February of that year). Ajinomoto Co., Inc. cooperated with a series of surveys on the mindsets of working women that led to the development of this product.

Toss Sala® is a powder-type dressing that can be mixed with uncooked vegetables to make a flavorful and textured salad, and one of its features is that it makes salads look attractive. The three varieties available were *Italian/Basil*, *Maroyaka na Kyofu Yuzu*, and *Surigoma Garlic*, and a tetra-type package design was adopted. The product design, including the name, was created with the desire to enjoy different types of cooking ("Toss" refers to mixing) with a different kind of atmosphere.

Mayonnaise, cup soups, porridge: healthier and more versatile

Knorr® Cup Soup, *Pure Select*® (mayonnaise), and *Okayu* (porridge) series, which can be considered basic products in the packaged foods domain, address the desire to provide delicious foods without much time and effort, and we have expanded the lineup by adding new flavors and product types.

For *Pure Select*®, *Pure Select*® Koku Uma® Calorie 65% Cut was released in August 2012, which further reduced calories from the conventional 55% type. In addition, we made efforts to enhance the brand, such as via a collaboration with the world-famous character *Hello Kitty* (August 2010) and packaging improvements to address environmental issues (June 2011).

In 2018, in commemoration of the 50th anniversary of the release of *Ajinomoto KK Mayonnaise* (1968), we updated the packaging for all of the products in the series. We also improved the taste and flavor of both *Pure Select*® and *Pure Select*® Koku Uma® Calorie 65% Cut.

With regard to the *Knorr*® Cup Soup series, we expanded the options for sub-brands, adding varieties that included *Zeitaku Vegetables* (2010), *Premium* (2016), and *Veggie Recipe* (2018), and we augmented the lineup each year. Among these, the "made with cold milk" series, which was launched in 2014 and can be enjoyed during the hot summer season, received a lot of attention.

In the *Okayu* series, two varieties of *Ajinomoto KK Hiyashi-dashi-gayu* (a bonito and kelp-based soup stock, and a chicken and dried scallop-based soup stock) were launched in February 2011, which added spring- and summer-exclusive products to the lineup. Survey results revealed that consumers wished to cook without using the stove during hot seasons, so these products were developed based on the increased popularity of dishes such as chilled soup and chilled *Chazuke* (tea on rice). At the same time, given that the *Okayu* series is widely used in atypical situations such as during travel, leisure, illness, and disasters, we took steps to emphasize that the entire lineup of products can be eaten without being heated.



Pure Select® (left),
Pure Select® Koku Uma® Calorie 65% Cut (right)



Knorr® Cup Soup
Premium Clam Chowder



Knorr® Cup Soup made with cold milk
Corn Potage

When the Kumamoto earthquake occurred in April 2016, 54,000 servings of *Shirogayu* and *Umegayu* were provided as emergency relief supplies.



Ajinomoto KK Okayu
Shirogayu



Ajinomoto KK Okayu
Umegayu



Ajinomoto KK Okayu
Tamagogayu

Cook Do® Koumi Paste®: Achieving authentic Chinese cuisine

As part of the enhancement of the “Cook Do®” brand, we enriched our lineup of packaged foods that allow main dishes to be prepared with ease, and we also introduced new seasonings that provide authentic tastes and support a wide range of dishes. The Chinese seasoning *Cook Do® Koumi Paste®* (launched in August 2011) is a soft paste made by combining chicken/ pork extract and seasoning oils such as green onion oil.

Cook Do® Koumi Paste® can be used for all kinds of Chinese dishes, which includes soups, stir-fried meat and vegetable dishes, and fried rice. This product could also be used as a secret ingredient for non-Chinese dishes and various other ways. To make it more convenient for consumers, we used tube-type packaging.

The lineup began with *Cook Do® Koumi Paste®* and *Cook Do® Koumi Paste® (Spicy)*, and in July 2014, we added *Cook Do® Koumi Paste® (Shoyu)*, which can be used for soy sauce-base soup and thick starchy sauce. In addition to general usage, we also made efforts to provide plenty of “secret recipes” that were useful for both Japanese and Western-style dishes on the *Recipe Daihyakka®* site on the **AJINOMOTO PARK** site. For non-Chinese recipes, we proposed authentic recipes both for Japanese-style dishes, such as *Oden*, *Ajitsuke Tamago*, and *Kakuni*, and Western-style dishes, such as *acqua pazza* and *ajillo*.

In February 2018, we released packages of *Cook Do® Koumi Paste®* that contain two 10g bags that can be purchased and used in small quantities with ease.



Cook Do® Koumi Paste® (left)
Cook Do® Koumi Paste® (Spicy) (right)

Knorr® Soup DELI®: Expanding the possibilities of soup

Launched in 2001 as part of the “Knorr®” brand lineup, *Knorr® Soup Pasta* was the pioneer for snack soups containing staple ingredients such as pasta and vermicelli. The snack soup market later grew to occupy a quarter of the soup market. About 70% of the market was comprised of women’s consumption, and it was consumed in particular for lunch either at work or while doing housework. Consumers desired that lunch soups make filling additions to meals compared to those that are eaten with bread during breakfast.

Based on these facts, we changed the brand to *Knorr® Soup DELI®* with plenty of ingredients series in August 2011, and we made efforts to specialize in Western-style varieties in 2013. From the beginning, there was a rich lineup of nine varieties available, which allowed consumers to have fun with their selections, much like a delicatessen (Western-style store that offers household dishes exclusively for takeout). In addition to containers that allow the food to be eaten as-is, some varieties were also launched in bags convenient for home storage.

Cook Do® Okazu Gohan: Attaining meals consisting of soup, rice, and three dishes with ease

Although the number of households whose daily meals consist of soup, rice, and three dishes—regarded as the ideal nutritional balance—has decreased, it is important for people of all ages to have a balanced intake of carbohydrates, proteins, fats, vitamins, minerals, and dietary fiber, and this is fundamental to meals. To achieve this fundamental need as the demand for simpler



Knorr® Soup DELI®
Porcini Kaoru Kinoko no
Cream Soup Pasta (in container)



Knorr® Soup DELI®
Marugoto Ikkobun
Kanjuku Tomato Soup
(in container)

cooking continued to grow, we developed *Cook Do® Okazu Gohan*, a combined seasoning for rice that uses the staple food rice as the main dish. The biggest selling point was that the main dish and rice could be cooked together simply by cooking the rice and ingredients together in a rice cooker, and the side dishes could be prepared while the rice was being cooked.

In August 2015, the *Asian Keihan* (chicken rice), *Buta Okowameshi* (pork sticky rice), and *Tori (Chicken) Curry Pilaf* varieties were given an advance release in the Tokyo metropolitan area. When they were released nationwide in February of the following year, the *Tori (Chicken) Paella* and *Hong Kong-fu Tori no Mazemeshi* (Hong Kong-style chicken rice) varieties were added, and in August of that year, *Kankoku-fu Bibimba* (Korean-style bibimbap) and *Butter Tori Pilaf* were added, which enhanced the lineup.

For each product, our original technology was used to enrich the flavor, and steps were also taken to make the cooked rice blend well with each flavor.

Supporting protein intake and contributing to zero food loss and waste

While meat consumption in Japan has always increased slowly before temporarily leveling off, it began to increase again starting in 2010, and it surpassed fish consumption in 2018. In recent years, the booms in dry-aging meat and wild game have boosted consumers' interest in meat, and the popularity of chicken, which is low in calories and high in protein, has established itself as well due to the impact of the rise in health-consciousness. Moreover, various money-saving recipes have made an appearance due to the long-lasting recession, and many techniques have been invented in particular for inexpensive chicken breasts, which tend to dry out, and make them delicious to eat. As meals that incorporate meat became central to home cooking, some began to request solutions to issues that arose depending on the cooking method, such as the meat growing hard or drying out.

In response to this situation, we developed the meat seasoning *Oniku Yawaraka-no-Moto* in February 2016. Sprinkling the product on any type of meat and letting it sit for five minutes before cooking will soften the meat with the power of enzymes through a unique formulation technology that combines enzymes and starch, etc. The starch preserves the juiciness by trapping the meat juices, and our original ingredient glutamyl-valyl-glycine (see "History" p.54) has the ability to enhance the deliciousness of the ingredients. In addition to responding to the desire to save money, there was also a desire to reduce food loss and waste as much as possible by providing a way to enjoy eating various types of meat in a time when depletion of food resources has become a serious social problem.

The technology for trapping the meat juices also addressed changes in the food situation in households. In many households, families are increasingly eating meals at different times, and cold dishes are often reheated multiple times. Another major feature of this product is that it makes meat dishes delicious even if they are cooled or reheated.

Also, in September 2017, we released *Konya wa Tezukuri Kibun®*, which allows consumers to easily cook a single dish simply by mixing it with protein (tofu, chicken, eggs) that can be purchased at CVS.



Oniku Yawaraka-no-Moto



Konya wa Tezukuri Kibun®
Mala Mabo Tofu

(4) Development of nutrition business for the elderly utilizing original technology and know-how

Development of nutrition business for the elderly

Our nutrition business for the elderly began in 1969, when we launched products for protein-energy malnutrition via our medical route. AJINOMOTO NUTRITION FOODS Co., Ltd. (promotion of medical foods) was established as a subsidiary of Ajinomoto Pharma Co., Ltd. (see p.96) in April 2008 after the total nutrition care movement established by the Pharmaceutical Company, and our nutritional care business began in May 2009. We launched three varieties for hospitals and nursing facilities exclusively in the Kanto and Koshinetsu areas, Japan, and we provided the nutrition needed by the elderly with the same delicious taste as ordinary food. We expanded the launch to the Tokai, Kinki, Chugoku, Shikoku, and Kyushu areas in Japan starting that August, and it was launched nationwide in November. At the outset of the nationwide rollout, we marketed nutritional care products as products with nutritional compositions suitable for the

elderly that could provide “Joy of Eating” due to their delicious taste, which would improve the amount and frequency of their consumption by elderly individuals requiring long-term care. We also said that they would improve Quality of Life (QOL) for the elderly and provide a high amount of nutrition and deliciousness in a small quantity, and we added three varieties.

With the establishment of the Wellness Business Division in July 2009, the Medical & Nutrition Food Business Department within the division was mainly responsible for elderly nutrition-related matters, and in April 2010, the medical food business for AJINOMOTO PHARMACEUTICALS CO., LTD. was integrated, which formed the Nutrition Care Department. After the dissolution of the Wellness Business Division in April 2015, it was turned into the Nutrition Care Group in the Wellness Business Department under the AminoScience Division.

During this period, the product lineup was enhanced as well, but in April 2016, the diets for protein-energy malnutrition (enteral nutrition) business was transferred to Nestlé Japan Limited, and the Nutrition Care Group became a part of the Consumer Foods & Seasonings Department in the Food Products Division. It specialized in nutritional care foods sold through the household-use channel and in-house online order sales (medical channel sales were outsourced to Nestlé Japan Limited, and in-house online order nutritional care foods are in sales as nutritional care foods). As a result, AJINOMOTO NUTRITION FOODS Co., Ltd., which had been in charge of sales through the medical channel, was dissolved in November 2016.

Nutritional care foods differentiated by the amino acids they contain

When the nutritional care food business started in May 2009, the sales area was limited to the Kanto and Koshinetsu areas, but in August the sales channels were expanded to the Tokai, Kinki, Chugoku, Shikoku, and Kyushu areas. *MediMill® Soup (Corn)* and *AminoCare® Jelly (Apple and Muscat)* were the products initially released. Both were based on the idea that even elderly people with low food consumption can be provided with delicious nutritional supplementation without strain. In November 2009, sales were expanded nationwide.



MediMill® Strawberry Milk



MediMill® Coffee Milk



MediMill® Banana Milk



MediMill® Vanilla

MediMill® Soup (Corn) is a powdered soup with a well-balanced nutritional composition that complies with Japanese dietary intake standards (a blend that contains 5.3g of protein, 1.8g of branched-chain amino acids (BCAA), and vitamins and minerals, and that is enhanced with iron, zinc, and dietary fiber, which the elderly tend to lack). For the corn, we used highly sweet varieties grown through managed cultivation, and we focused on “deliciousness” in particular. Since then, we have launched the following *MediMill®* products.

- | | |
|----------------|--|
| November 2009: | <i>MediMill® Soup Potato Potage</i> launched |
| April 2010: | Brick pack-type <i>MediMill®</i> flavored beverage (<i>Strawberry milk</i> , <i>Coffee milk</i>) launched |
| February 2015: | Launched the industry’s smallest-volume (100ml) and highly nutritious (200kcal) beverage, <i>MediMill® Petit Leucine Plus</i> in four flavors (<i>Banana milk</i> , <i>Coffee milk</i> , <i>Strawberry milk</i> , <i>Vanilla</i> , updated products currently available). |
| 2015: | <i>MediMill® Soup Wafu Miso Tonyu Shitate</i> launched |



Knorr® Soup series
Rich in Protein Cream Corn



Knorr® Soup series
Rich in Protein Potage

In August 2017, *MediMill® Soup* was re-launched from the “*Knorr®*” brand as a “*soup series rich in protein*” (*Corn cream, Potage*).

AminoCare® Jelly contains a 1,000mg blend of BCAA and arginine, which the elderly need, and we made sure that the 100g amount is easy to consume in an easy-to-grip container shape, and that it has properties that make it easy to eat tastily. In addition, the apple flavor contains 100kcal and the muscat flavor contains 15kcal (low-calorie type), which allows the lineup to be used appropriately according to one’s nutritional status.

In March 2014, *AminoCare® Jelly Leucine 40 (Apple)* was added, and it contributes to the promotion of exercise, such as during rehabilitation. It contains a blend that includes 3,000mg of *Amino L40®*, an essential amino acid mixture with high leucine content that received excellent evaluations from Japan and overseas academic societies; vitamin D800IU (20μg); and B vitamins (B1, B6, B12), which allows the product to contribute to increased healthy life expectancy. The product became part of a Food with Functional Claims (FFC) category, and in August 2017, it was switched to the “*Amino Aile®*” brand, and sales of *AminoCare® Jelly* ended.

In addition, the oral rehydration solution *AquaSolita®* was developed as a product for our elderly nutrition business. We have expanded our product lineup as shown below by promoting properties that include fast absorption and few calories while using our unique formulation technology to mask the bitterness of the electrolytes.



Amino Aile® Leucine 40

March 2006:	125ml carton can launched
November 2009:	Two varieties of <i>AquaCare® Jelly</i> launched for nationwide expansion of nutritional food business
August 2010:	Launched sets of five 22g powder-containing bags (for 1 liter) (rapid increase in number of heat stroke patients due to record heat)
May 2014:	Added 500ml bottled drinks

This product played a major role as part of our relief supplies in the event of natural disasters, such as the Kumamoto earthquake (2016) and the heavy rainfall in western Japan (2018).

(5) Reform of sales activities in Japan

Sales innovation and introduction of ASMA

Due to the soaring price of grain and crude oil from 2007 to 2008, raw material costs and energy costs also increased for our products, and although efforts were made to reduce these costs, we were forced to raise the price for some products. The addition of low growth made the business environment more difficult, and it became essential to respond to changes in the market structure, which included the reorganization of Japan and overseas food manufacturers.

In January 2006, we began sales innovation, which consisted of “mission innovation,” “activity innovation,” and “human resources innovation,” in order to respond to these changes in terms of sales activities in the food products business in Japan.

Through “mission innovation,” we aimed to create new added value by integrating raw material procurement, manufacturing, marketing, logistics, and sales.

Through “activity innovation,” our main goal was to respond to changes and strengthen competitiveness through improved sales activities, the prioritization of customers and operations, closer ties with local customers, and streamlined personnel and organizations. Among these efforts, improvement in sales activities means to secure advantages through proposals based on in-depth data analysis and other methods as retailers and packaged food product manufacturers work to digitize their ordering systems with a focus on POS. Specific measures have been developed separately for products aimed at consumer use, food services, and food manufacturers, and in the consumer use domain, we introduced the Advanced Store-based Marketing of Ajinomoto Co., Inc. (ASMA) system. In this system, we use IT tools in our sales activities to ascertain consumption trends at retail stores on a daily basis and thus conduct proposal-based sales of consumer products. We established a mass retailer store monitoring system, a POS

analysis system, and more.

In addition, we introduced a sales support system called the Ajinomoto Lifestyle & Food Market Data Analyzing System (ALFA), the goal of which is to recognize consumer trends characterized by diversifying values and upgrade from “sales directed at wholesalers and mass retailers” to “sales directed at consumers.” We promoted area/consumer-based marketing that utilizes local market information, business region status for each customer, consumer spending habits, and in-store purchase trends, etc.

Strengthening sales cooperation with local governments and customers

Moreover, starting in FY2016, cooperation with local governments and customers became more involved in resolving the increased burden of overnutrition (sugar, etc.) and undernutrition (calcium, protein, etc.). One example is the salt reduction initiative in the Tohoku area, where salt intake has traditionally been high and is an indirect cause of stroke. First, we collaborated with Iwate, Japan, which has the highest salt intake, to promote reduced-salt products and develop low-sodium recipes, and the prefecture established a “Low and Proper Salt Intake Day” to strongly promote low-sodium diets. As a result, both men and women succeeded in reducing their salt intake by about 2g a day, which put them below the national average. In addition to this salt reduction initiative, initiatives to create economic value through resolutions to social issues (ASV), which include eating less vegetables and skipping breakfast, spread to 39 prefectures in FY2019.

In addition, besides targeting the general public for promotion of the nutrition program *Kachimeshi*® cultivated as part of the *VICTORY PROJECT*® for top athletes, the evolution of this effort into a proposal for menus that use local ingredients assisted in the resolution of health and nutrition issues faced by local governments (see “History” p.69-70). As a result, the number of stores that deployed such ASV initiatives in FY2019 expanded significantly to a total of 60,000.

Thus, results have been produced through promotion of sales activities with a focus on consumers and the cooperation of local governments and retailers.



Kachimeshi® promotions in stores (the two items on top)



Kachimeshi® Special Talk Show in Mie (Mr. Eikei Suzuki, Governor of Mie is in center)



Kachimeshi® promotions in stores in Mie

3

The International Seasoning and Packaged Food Product Business

(1) Basic strategy for international food product business

Strengthening our regional portfolios

The Ajinomoto Group's overseas expansion experienced a turning point in February 2003, when a joint venture in six Asian countries and regions that involved the seven subsidiaries of Unilever N.V. was terminated. As time went by, the joint corporation that was established in 1987 had become a burden in terms of launch of new products, etc. The termination of the joint venture accelerated the expansion of our international food product business. In particular, development and sales of flavor seasonings were accelerated in all countries and regions where we operated businesses.

On the occasion of the 100th anniversary of our founding in 2009, Masatoshi Ito, who became President & CEO in June of that year, declared "acceleration of overseas growth" as one aspect of our basic strategy to achieve our Vision. In the FY2011-2013 Medium-Term Management Plan that followed, we established "global growth" as a growth driver and adopted a policy of increasing our presence in existing markets and developing markets in emerging regions (South Asia, the Middle East, Africa, Central and South America). Increasing our presence in existing markets entailed the enhancement of the flavor seasonings business domain (improving the market share and profitability of major products) and cultivating next-generation core products (powder-based menu-specific seasonings/functional seasonings). In terms of the development of emerging markets, the focus was on speed and utilized an approach that differed from our conventional methods for expansion into overseas markets. This included the use of core regional bases (Thailand in the case of Asia) as hubs to enable a vertical launch from the start for businesses in surrounding countries, launch of products from the start other than *AJI-NO-MOTO*®, and M&A and alliances with major local food companies.

This policy was continued in the FY2014-2016 Medium-Term Management Plan, and five main markets in Southeast Asia and South America (Thailand, Brazil, Indonesia, Vietnam, and the Philippines) that were drivers of growth were designated the "Five Stars." The goal was to earn two to three times the sales compared to FY2012 by FY2020. Further, high-population regions were targeted, such as Bangladesh, Pakistan, Turkey, Egypt, and Sub-Saharan nations (south of the Sahara Desert in Africa) as "Rising Stars." Meanwhile, in Europe and the U.S., where market development focused primarily on the bulk product businesses (feed-use amino acids, MSG for food manufactures, sweeteners) until then, plans were made to expand the frozen food product business as part of a shift towards retail.

The international food products business played the role of growth driver through a combination of this regional portfolio strategy and the provision of social value through resolutions to the challenges facing the world, such as over-nutrition in developed countries and malnutrition in developing countries.

Meanwhile, in the international food products business, "The AJINOMOTO GLOBAL FOOD COMMUNICATION SYMBOL (ACOS)" was developed as a general brand that integrated individual product brands in the consumer foods business, and it was introduced in FY2009. This demonstrates our commitment to the realization of "Eat Well, Live Well." (the unification of deliciousness and health) around the world through contributions to global sustainability, food resources, and healthy living. The consolidation of the value of our product brands in ACOS had the strategic advantage of increasing the presence of consumer products in

stores and improving the efficiency of communication compared to competitors. This initiative has been inherited by the AGB (see “History” p.81) and made further progress towards the accumulation of value in the Ajinomoto Group Brand.

Establishing Ajinomoto SEA Regional Headquarters Co., Ltd.

In the FY2014-2016 Medium-Term Management Plan, we declared our intention to become a Genuine Global Specialty Company (GGSC) to further the advancement of specialty throughout our businesses. In the international food products business, our strategy’s top priority was the achievement of dramatic growth within “Five Stars” through the introduction of local core food products in each country, expansion to food service channels and modern channels (supermarkets, convenience stores, etc.), and expansion of our businesses to surrounding regions with “Five Stars” as a launch point. To establish a management base that will carry out these measures, governance reforms were promoted to provide it with the mobility and efficiency appropriate for GGSC. Also, starting in FY2015, we clarified and transferred authority and strengthened the proposal system (fully introduced as GGP at the beginning of FY2016 (see “History” p.79-80) based on the system of “the governing headquarters and the delegated front that can run on their own,” with the goal of accelerating on-site decision-making.

We began with reforms in Southeast Asia, where four of our “Five Stars” countries exist, and in January 2015, we established Ajinomoto SEA Regional Headquarters Co., Ltd. (ARH), a fully owned subsidiary of Ajinomoto Co., Inc., in Bangkok, Thailand. The company started with paid-in capital of 715 million baht (approx. 2 billion yen) and 25 employees. It integrated our businesses and the Group companies related to consumer foods throughout Southeast Asia and South Asia. Specifically, these efforts began with the formulation of regional part of the Group-wide strategy, which entailed the aggregation and management of business plans and results; consideration of new businesses and M&A; brand management; consideration of new technologies and materials and their uses; tasks related to personnel, legal affairs, auditing, and information systems planning; corporate management; management of quality assurance, safety, and environmental policy; support for development and sales marketing; support for business infrastructure development; development of advertisements and packaging; and product evaluation, etc.

With the establishment of a joint venture with the Pakistan-based Lakson Group in August 2016, ARH served as our investment company and played a leading role.

(2) Expansion in Southeast Asia and China

Expansion in the major markets of four of our “Five Stars” countries

We designated four of the aforementioned “Five Stars” countries—Thailand, Vietnam, the Philippines, and Indonesia—as our main markets in Asia, and we expanded the market share of main products, including *AJI-NO-MOTO*®. At the same time, we focused on developing products that could serve as the core of the next generation.

One of these was powder-type menu-specific seasonings for casual purchase. Products such as the following were released in accordance with local tastes to appeal to the trend towards convenience.

Thailand: *Ros Dee*® Menu series

Vietnam: *Aji-Quick*® series

Philippines: *CRISPY FRY*® series

Indonesia: *Sajiku*®, *SAORI*®, and *Delito*

Functional seasonings included liquid seasonings (*Takumi-Aji* in Thailand, *Sarsaya*® in the Philippines), etc. We also pursued business expansion through the introduction of convenient and filling light meals (the pancake mix *Bánh Rán* in Vietnam and increased varieties of *Yum Yum*®¹ instant noodles in Thailand, among others).

1. Launched by WAN THAI FOODS INDUSTRY CO., LTD., in which we acquired a share in 1972. As of 2019, there are 15 varieties of pillow-type noodles, 7 varieties of cup-type noodles, and 3 varieties of snack noodles available.

Expansion in Thailand (1): Reinforcing the system to maintain our largest overseas market

Thailand is the largest overseas market for us and is also an important country for production that contains production sites for MSG, seasonings, coffee, and frozen foods. Although it was hit hard by the 2011 Thailand floods, the impact was minimized through local efforts and accurate announcements for those outside the Group, and AJINOMOTO CO., (THAILAND) LTD.'s sales accounted for 40% of total sales from our overseas businesses in FY2014.

We established a local subsidiary in 1960 to popularize and establish *AJI-NO-MOTO*®, and as the Thai economy grew, we gradually released the flavor seasoning *Ros Dee*®, the menu-specific seasoning *Ros Dee*® Menu, and the liquid seasoning *Takumi-Aji*. We ultimately attained over a 25% market share in the seasonings, sauces, and dressings category (FY2014). In addition, *Birdy*® canned coffee, released in 1993, appealed to customers through the characteristics of waking up and feeling refreshed, and the strategy of developing sales channels primarily through gas stations succeeded. It grew into a top brand that comprises 70% of the market share, and the stick type *Birdy*® 3 in 1 also became a major product for AJINOMOTO CO., (THAILAND) LTD. *Yum Yum*® instant noodles have become an important product as well.

Based on these achievements, from 2012 to 2013, production capacity was increased for a plant (completed in 2003) that makes nucleotides used in combination with MSG as an ingredient for soups and flavor seasonings, with the goal of enhanced cost competitiveness and response to increased global demand. Subsequently, a new umami seasoning plant (annual production of MSG: 64,000tons) was established in Ayutthaya (total investment: 24 billion yen) in October 2013. We also increased the production capabilities of *Ros Dee*® in Saraburi in August 2017. Given the expansion of the middle-income population, the Thai flavor seasonings market is expected to continue its expansion due to the increase in usage per household and an increase in usage opportunities mainly in the food stall-style market. For *Birdy*®, we opened a second plant (approx. 12.5 million cases; investment amount of 4.5 billion yen) to enable product development to meet changing demand. It began operations in July 2013 and doubled production capacity.

However, due to political turmoil² in Thailand, sales remained flat for several years after FY2013. With about 20 years having elapsed since its launch, the “*Birdy*®” brand was unable to demonstrate the ability to stimulate new demand, and its market share declined due to the entry of Nestlé S.A., the largest food company. In addition, for modern trade transactions (supermarkets and convenience stores), which had become more important as new sales channels, negotiating with headquarters was the standard, which put us in a difficult situation. This is because this approach differed from the direct cash sales model (three actuals principle; staff at the actual site selling actual products for actual cash) that used to be effective in the traditional market. However, at present, AJINOMOTO CO., (THAILAND) LTD. has launched new products that include espresso-flavored and tea varieties of *Birdy*®, strengthened sales of unique *Yum Yum*® flavors and food service products, and provided visualization and standardization (through the use of IT) for traditional trade (small-scale retailers) coverage, which has allowed it to overcome these issues and continue to maintain its role as our largest site in Asia.



AJINOMOTO CO., (THAILAND) LTD.
(Headquarters)



On-site observation of Ayutthaya Plant
construction

2. In 2014, the Commander of the Army launched a military coup, suspending the Constitution and Parliament. In July 2019, civil government was restored, but the army has significant influence over the government.



AJINOMOTO CO., (THAILAND) LTD. products

Expansion in Thailand (2): Developing markets in surrounding countries

Utilizing the production sites and sales know-how of AJINOMOTO CO., (THAILAND) LTD., we advanced market development in neighboring countries as well.

In Cambodia, AJINOMOTO (CAMBODIA) CO., LTD. was established in September 2009, and a packaging plant was established in the Phnom Penh Special Economic Zone. Several factors were behind the plant's opening, such as the fact that in the past, Cambodia had imported and sold pre-packaged *AJI-NO-MOTO*® from Thailand, but the impact of TV commercials and so on facilitated market penetration, which resulted in the sales volume nearly doubling in the three years from 2005 to 2008 in Cambodia. There was also the fact that damage occurred due to reshipments during transport.

Moreover, in Myanmar, where business had been suspended in April 2000 due to changes in the business environment while a local subsidiary (Myanmar Ajinomoto Industry Co., Ltd.) was established in 1995, progression in the opening of the economy starting in 2011 led to our re-entry into the market, as described below.

- 2012: *AJI-NO-MOTO*® exported from AJINOMOTO CO., (THAILAND) LTD. was launched in Myanmar
- May 2015: Guidelines for special economic zone went into effect
- February 2016: Myanmar Ajinomoto Foods CO., LTD. established
- August 2017: *AJI-NO-MOTO*® production (packaging) plant began full-scale operations in the Thilawa Special Economic Zone in Yangon
- February 2018: New plant in the Thilawa Special Economic Zone for the instant coffee *Birdy*® 3in1 (stick type) began operations.
A Ros Dee® production line was introduced at the *AJI-NO-MOTO*® plant

Umami seasonings are widely used at home in Myanmar, primarily for curry dishes, and the annual consumption amount for umami seasonings is also one of the highest in Southeast Asia. In addition, the size of the powdered beverage market is said to be about twice that of Thailand (approx. 247,000tons in 2016), and it is expected that sales of *Birdy*® will be expanded through the utilization of the brand power it has in Thailand.

Including the flavor seasoning *Ros Dee*®, given the continued economic growth in Myanmar, we are aiming for annual sales of 3 billion yen in FY2020.

Expansion in Vietnam: Rapid market growth and development of original products

In Vietnam, AJINOMOTO VIETNAM CO., LTD., established in 1991, has handled production and sales for *AJI-NOMOTO*®, flavor seasonings *Aji-ngon*®, and *Aji-Mayo*® mayonnaise, and other products for Vietnam. Since then, the sales volume for *AJI-NO-MOTO*® has increased year by year along with the economic growth of the country, and Vietnam's flavor seasoning market has become the second largest in the world after China (according to a 2014 Ajinomoto Co., Inc. survey). In response, AJINOMOTO VIETNAM CO., LTD. has expanded its production facilities several times.

Furthermore, it was positioned as one of our "Five Stars" in the FY2014-2016 Medium-Term Management Plan, and given its goal of tripling sales by 2020, it has actively conducted marketing activities and striven for constant improvement of various products and packaging, which has enabled it to achieve business expansion. In August 2017, the production capacity of the Bien Hoa Plant in Dong Nai was increased by 1.2 times in anticipation of



Visit to Cambodia retail market



Visit to Myanmar Ajinomoto Foods CO., LTD.



Visit to Vietnam market

market growth, which was expected to be 2-3% per year.

Efforts were also made to develop and launch original products, which include:

The *Aji-Quick*® menu-specific seasoning series

For hotpot	<i>Lâu Thái and Lâu Kim Chi</i>
For stew	<i>cá kho and thịt kho</i>
For noodle soup	<i>Phở Bò and Bún Bò Huế</i>
Fried chicken flour	<i>Bột Tôm Khô Chiên Giòn and Bột Chiên Giòn</i>
Tencho (savory seasoning)	<i>THIT HEO PLUS</i> (for pork dishes)

Additionally, the pancake mix *Bánh Rán* (*Bánh* is a general term for dishes that use flour; *Rán* means “to fry”) was launched in July 2016.



Bánh Rán

Expansion in Indonesia: Increased production of long-selling products

In Indonesia, since the establishment of PT AJINOMOTO INDONESIA in July 1969, the flavor seasoning *Masako*® (launched in 1989) and the menu-specific seasoning *Sajiku*® (launched in 1999) have acquired a market share of 60%. *Masako*® had been produced at Mojokerto Plant in the eastern part of Java Island, but in anticipation of increased demand, a new plant was established in the Karawang International Industrial City in the western part of Java Island in 2012. It became operational in September of the same year and contributed to a 50% increase in production capacity and streamlined logistics. Afterwards, the volume of sales grew rapidly, and in 2017, the two plants were expanded, which raised their combined production capacity by about 30%. For the expansion of Karawang Plant, we created a new visitor passageway that offers a view of all floors and processes. We consciously set out to create a production site that we could show to our business partners and visitors.

In addition, the liquid seasoning *SAORI*® launched in 2005 acquired the No. 1 market share in the home use oyster sauce and teriyaki sauce market, and further growth was expected as a result of an increased need for convenient cooking due to the economic growth of Indonesia. In light of this, in June 2014, we built a new facility in the Karawang Plant. As a result, production capacity doubled, and it became possible to absorb contracted plant production at the plant.



SAORI® Saus Tiram

Expansion in the Philippines: Expansion of categories amid stable growth

In the Philippines, a joint venture Union Chemicals Inc. was established in May 1958 to begin local production and sales of MSG. It penetrated *AJI-NO-MOTO*® in the market primarily through private “Sari-sari stores,” an indispensable part of the lives of those in the Philippines, and of which there are said to be a million nationwide. In 2001, it was turned into an almost fully owned subsidiary and became AJINOMOTO PHILIPPINES CORPORATION. Furthermore, while maintaining this transaction base, we have expanded our business by focusing on modern trade transactions that include supermarkets and convenience stores.

The GDP growth rate for the Philippines has been around 6-7% since 2010, and as in developed countries, the need for convenience in home cooking continued to increase. This led AJINOMOTO PHILIPPINES CORPORATION to promote product diversification.

The menu-specific seasonings for fried chicken *CRISPY FRY*® (launched in 2004) and *Tasty Boy*® (launched in 2007) formed a whole new market in the Philippines, where there were few opportunities to cook fried chicken at home, despite its popularity at fast food restaurants.

In addition, according to a consumer insight survey, it was found that pork broth is the preferred seasoning for home-cooked dishes in the Philippines, and it became clear that there was a high need for an all-in-one type that mixes spices and basic seasonings. Thus, the flavor seasoning *PORKSAVOR*®, which contained pork extract, was developed and launched in June 2014 throughout the Philippines. The product name is a coined word that refers to the rich, delicious taste and flavor of pork, and TV commercials advertised its genuine taste made from pork meat and bones and its low price.

In addition, the oyster sauce *Sarsaya*® was launched in October 2016, and it aimed for growth amid the rapid increase in the types of seasonings used that coincided with economic development.



PORKSAVOR®

Expansion in China

The retail food business in China began in earnest in 1993 with the establishment of a joint venture, Lianhua Ajinomoto Co., Ltd., with the leading company in the local MSG industry. Since then, the two companies tried to expand their businesses in China by combining both brands, but sales continued to be sluggish, and in November 2005, the joint venture was dissolved. Meanwhile, Shanghai Ajinomoto Seasoning Co., Ltd. had been established in August 2002, and it began production and sales of six varieties of the Western-style soup *Yunon*, as well as the flavor seasonings *MOR CHU GAOTANG* and *HON-DASHI Dried Scallop Flavor Seasoning*.

In 2006, Hong Kong-based Amoy Food Group, whose main products are Chinese soy sauce and frozen dim sum, was acquired in an effort to accelerate business in China.

Even after the 2008 financial crisis (the Lehman Shock), China maintained high growth due to massive amounts of fiscal mobilization and other measures. It is said that around 2015, the number of wealthy people grew to 1.1 million households, triple the number in Japan, and the middle-class population exceeded 100 million. In July 2011, AJINOMOTO BAKERY CO., LTD. established Shanghai ABPan Co., Ltd. as a joint venture with Shanghai BreadTalk Co., Ltd. in order to take advantage of the food-related changes that accompanied these shifts. Shanghai BreadTalk Co., Ltd. is a subsidiary of a Singaporean company that operates food courts in 13 countries throughout Asia and the Middle East, and it has developed a bakery chain in China. Afterward, Shanghai ABPan Co., Ltd. went on to manufacture frozen bread dough to be supplied to the Shanghai BreadTalk Co., Ltd.'s bakeries. On a different note, in June 2017, a partnership was formed with Inagora Inc., which provides an e-commerce service for overseas markets, to open a store on that company's Japanese product shopping site, *Wandougongzhu*, which is aimed at Chinese consumers. It began selling 10 products to meet the demand for health and shorter cooking time.

In November 2018, we decided to sell all the shares in the Amoy Food Group to CITIC Capital Asian Foods Holdings Limited, a corporate fund belonging to the China-based CITIC Group, and decided to subscribe a 15% share of the company to start a joint venture.

Instead of pursuing the retail commodity product business, which tends to descend into price competition with local companies, our fundamental mindset is an emphasis on profit, with a focus on business aimed at food services and industrial food manufacturers, which can be developed as "Specialty", and products with added value such as health benefits. In the organizational restructuring in March 2019, the China Division, Beijing office, and Hong Kong office were shut down. Restructuring efforts have focused on the creation of a system that centralizes management of our businesses in China under Ajinomoto (China) Co., Ltd.



MOR CHU GAOTANG

(3) Expansion in Central and South America

Expansion in Brazil (1): *Tempero SAZÓN*®, the flavor seasoning boasting the top market share

Our efforts in the Central and South American market began in 1956. AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. was established in Brazil, where there were many Japanese immigrants before World War II. *AJI-NO-MOTO*® was imported from Japan and packaged locally, with sales promotions focusing mainly on Japanese food service. In 1974, Ajinomoto Interamericana Indústria e Comércio Ltda. was established as a manufacturing and sales base for seasonings. In 1997, Ajinomoto Co., Inc. acquired a share in Orient Co., Ltd., and in January 1998, it changed its name to Ajinomoto Biolatina Indústria e Comércio Ltda. and began the manufacture and sale of feed-use amino acids and umami seasonings. During this period, in 1994, Ajinomoto Interamericana Indústria e Comércio Ltda. took over AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. to form a two-company structure with Ajinomoto Biolatina Indústria e Comércio Ltda.

In October 2009, Ajinomoto Biolatina Indústria e Comércio Ltda. was renamed AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA., and in 2010, Ajinomoto Interamericana Indústria e Comércio Ltda. was integrated, which centralized operations in Brazil.

In terms of products, we began to develop flavor seasonings that match the tastes of Brazilians in order to tap into the Brazilian market, where there was rapid population growth. In 1988, we launched *Tempero SAZÓN*®, which means “magic seasoning.” The series grew to nine varieties for different uses, and it established itself as a brand that boasts the top market share. In June 2013, to strengthen and expand *Tempero SAZÓN*®, our core product, we expanded the production facilities at Limeira Plant in São Paulo (annual production increased by 40% (6,700tons)).

Meanwhile, the instant noodle business, which started with MIOJO PRODUTOS ALIMENTICIOS LTDA. (founded in 1965 and later renamed NISSIN-AJINOMOTO ALIMENTOS LTDA.), helped both to establish the market and maintain it in Brazil, and it continued to hold the top market share. In response to additional market growth expected in the future, NISSIN-AJINOMOTO ALIMENTOS LTDA. opened a new plant in northeastern Pernambuco in October 2012. However, in October 2015, we transferred its entire share in NISSIN-AJINOMOTO ALIMENTOS LTDA. (32.5 billion yen) to NISSIN FOODS HOLDINGS CO., LTD. The goal was to concentrate management resources towards the development of our own brand, given that the company’s business had been developed under the “Nissin” brand.

Expansion in Brazil (2): Expanding into neighboring domains via product diversification

Product development in Brazil was actively promoted through the utilization of the brand, technology, and sales channels built by *Tempero SAZÓN*®. In 2000, the powdered juice *MID*®³ was launched, and this was followed by the low-calorie powdered juice *FIT*®⁴ in 2005. The instant soup *VONO*®⁵ was launched in 2005, and the series grew to feature more than 10 varieties as efforts continued towards actively developing a variety of products and encouraging the practice of drinking soup with light meals to take root.

In the FY2011-2013 Medium-Term Management Plan, *MID*® and *VONO*® were positioned as main products along with *Tempero SAZÓN*® and expanded. Another major goal was to expand the food service business and expand businesses to neighboring regions (Argentina, Chile, Colombia, and Central America).

After the country was positioned as one of “Five Stars” in FY2014-2016 Medium-Term Management Plan, a number of initiatives were advanced, such as the introduction of new products that included powder/liquid seasonings, dessert mixes, and oil-based products; the expansion of lines of business through alliances, such as frozen foods; and the promotion of the “Deliciousness in Brazil” project⁶, which aimed to offer deliciousness to Brazilians through the use of onions and garlic as key ingredients.



Tempero SAZÓN®



MID®



FIT®

3. As of 2019, 19 varieties are available, and they include pineapple, vanilla lime, persimmon, guava, sourp, and gooseberry.
4. As of 2019, 10 varieties are available, and they include blackberry, lime, mango, and lime tea.
5. With the termination of the joint venture with Unilever N.V. in Asia in 2003, the “Knorr” brand became usable only in Japan, so this was launched as a new soup brand. Seven creamy products were developed to suit Brazilian tastes, including cheese, tomato, and basil.
6. Brazilian and Japanese developers aligned their evaluations of what constitutes “deliciousness” for local consumers, and they bridged the differences in local and Japanese sensations about the elements that make up the product, which include taste, flavor, appearance, and texture.

Further, in response to the rapid growth of the menu-specific seasoning market in Brazil, the menu-specific seasoning *Satis!*® for milanesa was launched in May 2014. Milanesa is a typical Brazilian home-cooked dish that is made by seasoning meat with spices, sprinkling it with breadcrumbs, and frying it. While it is a popular dish, the difficulty is that it requires a lot of time and effort. So AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. developed *Satis!*® as a menu-specific seasoning for a variety of dishes that can be prepared without oil in an oven or a microwave, which has become popular in many households. It started with three varieties: plain; cheese, tomato, and basil; and herbal lemon. In September 2016, *amino VITAL*® GOLD was launched on online shopping sites.

In 2018, it integrated the development and business departments and established a system that can manage the entire product development process. In an effort to transform from a seasonings company to a food product company, it worked to make its entry into the frozen food, beverage, enzyme for food service, and other businesses, as well as expand its businesses into neighboring countries and strengthen its value chain.

Expansion in Peru: Active development of the instant noodle market

In Peru, AJINOMOTO DEL PERÚ S.A. was established in 1968 based on the spread of our products among those of Japanese descent, etc. In addition to *AJI-NO-MOTO*®, the flavor seasoning *Doña Gusta*® (for fish, beef, and chicken), *AJI-NOSILLAO*® soy sauce, and other products were manufactured and sold. In October 2002, *Aji-no-men*® instant noodles were launched in anticipation of rising income levels and a growing trend towards convenient foods. The three initial flavors were “chicken,” “beef,” and “oriental,” and besides Peru, they also became available in Bolivia, Chile, and Colombia. In 2016, it grew into a brand with 15 different varieties.

In addition, *Aji-no-mix*® fried chicken flour and other products were also developed to expand the Central and South American market.

Expansion in Mexico

In 1961, we acquired a share in Shin-Nippon Commerce, Inc. (currently Ajinomoto Trading, Inc.) to start full-scale exports of *AJI-NO-MOTO*® in addition to food and miscellaneous goods to Mexico. With the opening of the Mexican branch of Ajinomoto Biolatina Indústria e Comércio Ltda. in November 2004, the feed-use amino acid (animal nutrition) business assumed a leading position. Mexico is a major Central American country with a total population of about 130 million people and a per-capita GDP of about US\$ 10,000 (as of 2019), but the degree of market penetration for *AJI-NO-MOTO*® and *HON-DASHI*® was not as high compared to Brazil and other countries.

Ajinomoto de México, S. de R.L. de C.V. (Headquarters: Mexico City), which is in charge of the consumer food business, was established in January 2009, and in October 2012, *AJI-SAZON*® for food service was launched. Mexico is also an area where Ajinomoto Foods North America, Inc. has worked to expand its frozen foods, and further expansion is expected in the future.



Aji-no-men®

(4) Market development in emerging countries

Establishment of subsidiary in Bangladesh and joint venture in Pakistan

For global growth in the overseas consumer business, which is one of the growth drivers listed in the FY2011-2013 Medium-Term Management Plan, we targeted neighboring countries with regional core bases as hubs to develop new markets. For our targets, we settled on the Central and South American market, which could be approached from North America and Brazil, and the markets of the large, high-population countries of South Asia, the Middle East, and Africa, to which Southeast Asia and Europe served as a bridge.

Possible locations for the establishment of a base included Bangladesh, Myanmar, and Pakistan in South Asia; Turkey and Egypt in the Middle East; and Côte d'Ivoire in Africa.

In Bangladesh, AJINOMOTO (SINGAPORE) PRIVATE LIMITED began to develop the market in FY2003, and sales continued to grow. Bangladesh is an Islamic country with a population of about 160 million people as of 2011, and this is expected to grow to about 210 million people by 2025. Its population density is one of the highest in the world, and daily meals consist of bean soup and vegetable curry along with rice, so demand for *AJI-NO-MOTO*® was expected owing to its ability to enhance umami in these dishes. Thus, in August 2011, we established AJINOMOTO BANGLADESH LIMITED as a sales company that handles seasonings and packaged food products for consumers in the capital city of Dhaka. The company imported *AJI-NO-MOTO*® from PT AJINOMOTO INDONESIA and sold it to accelerate market development. In January 2013, we built a packaging plant for umami seasoning *AJI-NO-MOTO*® for consumer use in an industrial park in Tongi on the outskirts of Dhaka and began repacking bulk *AJI-NO-MOTO*® imported from Thailand.

In addition, Pakistan, which has a population of about 180 million as of 2012 (estimated to grow to 270 million in 2050), has been importing and selling *AJI-NO-MOTO*® since the 1970s, and it has penetrated the market to a degree through its use in stewed dishes provided by catering services as well as *dal* soup (bean soup) and *karaita* (meat and vegetable curry) cooked at home. For this reason, in July 2014, we established a local office and proceeded with preparations in Lahore, the capital of Punjab, the largest province. In August 2016, Ajinomoto SEA Regional Headquarters Co., Ltd. (see p.22), a fully owned subsidiary of Ajinomoto Co., Inc., established AJINOMOTO LAKSON PAKISTAN (PRIVATE) LTD., which imports and sells flavor seasonings and menu-specific seasonings, as a joint venture with the local conglomerate Lakson Group. The Lakson Group has strong distribution capabilities that span 180,000 retail stores nationwide and a strong network of distributors. We utilized these strengths to work on sales and build a business foundation for flavor seasonings that include *Masako*® and *CRISPY FRY*®, which have become standard in places like Indonesia and the Philippines.



Opening ceremony for AJINOMOTO BANGLADESH LIMITED

Developing the market in Turkey: Establishing a foundation through a local subsidiary and M&A

Our biggest target in the Middle Eastern market was Turkey. Although the population was just 76 million people as of 2012, the GDP per capita is over US\$ 10,000, and it is both undergoing Westernization and considered to be friendly towards Japan.

First, in July 2011, we established Ajinomoto Istanbul Food Sales Ltd. as a fully owned subsidiary in the Turkish capital. The company developed its business with a focus on food service seasonings not only in Turkey, but the Middle East and Central Asia as well.

Subsequently, in December 2013, Ajinomoto Co., Inc. acquired a 50% share in Kükre A.Ş., a premium-brand food company in Turkey that manufactures and sells liquid seasonings, pickles, and other products. It became a fully owned subsidiary in August 2017. This led to the acquisition of the “KEMAL KÜKRER” brand liquid seasonings business, which was owned by Kükre A.Ş.

Meanwhile, in April 2017, Ajinomoto Co., Inc. acquired Örgen Gıda Sanayi ve Ticaret A.Ş. as a fully owned subsidiary, which manufactures and sells powdered seasonings such as bouillon and menu-specific seasonings and packaged food products such as powdered soups and

powdered desserts under the “Bizim Mutfak” brand.

Then, in July 2018, to put the finishing touches on these measures, we integrated Ajinomoto Istanbul Food Sales Ltd., Kükre A.Ş., and Örgen Gıda Sanayi ve Ticaret A.Ş. into Ajinomoto Istanbul Food Industry and Trade Limited Company. This integrated and streamlined the corporate functions of the three companies, and the marketing and sales functions were utilized to create a strong business foundation as one of the Turkish leading general food manufacturers. We established a system to accelerate the sale of new products and exports to Middle Eastern countries and other regions through utilization of the unique ingredients and technologies owned by the Group. Eight years after the office was set up, development of the Turkish market was rapidly achieved.



Visit to Istanbul market

Expansion in Africa (1): Creating demand in Egypt

In the 2010s, Africa was the final frontier market that all industries had in their sights. With a population of about 1.2 billion as of 2015, sub-Saharan Africa had an average annual real GDP growth rate of about 5% from 2011 to 2015, and it was expected to form a huge economic zone. Due to the increase in middle-income consumers amid a period of economic growth, the diversification in demand and need for convenience has increased in particular among young people, and the seasoning and packaged food markets are expected to grow significantly.

Umami is a familiar component of the sub-Saharan diet, which uses seasonings traditionally made from fermented nuts. We began exporting products in the early 1980s, and in May 1985, a West Africa office (Lome, Togo) was established. Nigeria was designated as the first country for expansion, and in May 1991, WEST AFRICAN SEASONING COMPANY LIMITED (WASCO), which handled packaging, was established to facilitate a full-scale entry into the continent.



Observation of Egypt retail sales

With these preparations in place, in October 2011, we strengthened the system by reorganizing our European business, which has close ties to the continent geographically (see p.36), and at the same time, we established a local subsidiary, Ajinomoto Foods Egypt S.A.E. in Egypt. The company was responsible for the consumer food business, with a focus on the domestic market and the North African region, and it began with expansion into marketplaces in shopping districts in Cairo known as “souks.” It generated demand by proposing that its products be used in the dishes sold at “souks.” At the same time, it also explored the use of *AJI-NO-MOTO*® in home-cooked meals and raised awareness of its ability to dramatically enhance the flavor of the Egyptian rice dish, “*lodge*” (stir-fried rice that is boiled after adding salt), which led to sales.

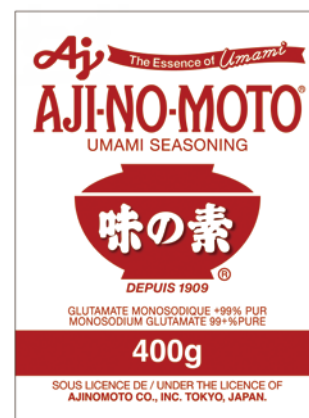
Development in Africa (2): Establishment of local subsidiary in Côte d'Ivoire

With regard to market development in West Africa, in January 2012, we established AJINOMOTO AFRIQUE DE L'OUEST S.A., a sales company for seasonings and packaged food products for consumer use, in Côte d'Ivoire, and started importing and selling *AJI-NO-MOTO*® the same month. *AJI-NO-MOTO*® was highly compatible with West African cuisine, in which soup is often eaten as a side dish, and at the start, the new company imported and sold packaged *AJI-NO-MOTO*® from WASCO.

In March 2013, a packaging plant for *AJI-NO-MOTO*® was constructed and entered full-scale operations in an industrial park in Yopougon of Abidjan, the largest city in Côte d'Ivoire. This made it possible to import bulk *AJI-NO-MOTO*® from AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. and sell them in small packages that meet local needs.

Equity participation in Africa-based Promasidor Holdings Limited

One of the milestones in the development of the African market was the acquisition of shares



AJINOMOTO AFRIQUE DE L'OUEST S.A.
“AJI-NO-MOTO”®

(33.33%) in Promasidor Holdings Limited, a major seasonings and packaged foods manufacturer, in November 2016. The acquisition cost was US\$ 532 million (approx. 55.8 billion yen). The company operates in 36 African countries, primarily the five countries of Nigeria, Algeria, Ghana, the Democratic Republic of the Congo, and Angola, and produces and sells powdered milk, powdered beverages, flavor seasonings, cereal, and other products. Its brands have widely penetrated the African market. We will strengthen the business base throughout Africa by combining the Promasidor Holdings Limited's strong sales base in Africa with our own product development and production technology capabilities, and aim to establish the Group as a leading player in the market over the medium to long term.

Establishing an instant noodles business in India through a partnership with Toyo Suisan Kaisha, Ltd.

In April 2014, we signed a joint venture agreement with Toyo Suisan Kaisha, Ltd. with regard to the establishment of companies in the instant noodle business in Nigeria and India as one measure to rapidly advance our business development in emerging countries. The goal was to cultivate emerging markets through the combination of our sales base and marketing capabilities and Toyo Suisan Kaisha, Ltd.'s instant noodle development and production technology capabilities. In both countries, the demand for instant noodles has grown remarkably along with the increase in the purchasing power of the middle class, and both India (a market comprised of 4.4 billion servings with an average growth rate of 22% per year) and Nigeria (a market comprised of 1.9 billion servings, with an average growth rate of 7% per year) looked promising for future growth.

In December 2014, MARUCHAN AJINOMOTO INDIA PRIVATE LIMITED (Headquarters: Kanchipuram, Tamil Nadu), a joint venture, was established in India, and production and sales of instant noodles began in November 2016. However, the joint venture agreement for instant noodles in Nigeria was canceled in October of that year due to a drastic change in the economic situation linked to the fall in crude oil prices.

Expansion of “Blendy” brand powdered drinks in India

In the 2000s, India's economic development attracted attention as one of the BRIC (Brazil, Russia, India, and China) countries, and as of 2018, its population has exceeded 1.33 billion. It is a major South Asian country whose population is expected to overtake that of China in the 2030s to become the largest in the world.

We established AJINOMOTO INDIA PRIVATE LIMITED (Headquarters: Kanchipuram, Tamil Nadu) in October 2003, which has marketed *AJI-NO-MOTO*® and the menu-specific seasoning *Hapima*® (fried rice seasoning/fried chicken flour).

Starting in 2016, *A&M* instant noodles were added through a joint venture with Toyo Suisan Kaisha, Ltd. (see “History” p.49).

Furthermore, in order to enhance its consumer food business in India, in August 2017, we started selling *Blendy*® 3in1 coffee and masala chai in Tamil Nadu, which marked its entry into the powdered beverage market. We aimed to establish the powdered beverage market by selling the products at retail stores called “*Kirana stores*” and supermarkets, which was our first expansion into an overseas market after the acquisition of the *Blendy*® trademark in October 2016 (see “History” p.46). Coffee and black tea are consumed on a daily basis in the province. Coffee drunk at home is in instant powder form, while black tea is brewed with tea leaves, and hot milk and sugar are added to both, so it is expected that demand can be found for the convenience provided by “3in1”.



Promasidor Holdings Limited's representative products



Blendy® 3in1 Coffee



Blendy® 3in1 Masala Chai

4

The Global Frozen Food Business

(1) Full-scale expansion into the overseas frozen food market

Promoting globalization using a business framework fostered in Japan

Ever since the FY2011-2013 Medium-Term Management Plan, frozen foods have also played a vital role in the global expansion of the Ajinomoto Group's consumer foods business, which has consistently been positioned as a growth driver. The reason for this is that in North America and Europe, like Japan, there has been an increase in the diversification of food demand and the lack of workers in the food service market. This has led to the projection that the know-how and technology fostered in Japan can be sufficiently utilized in these two markets and that the frozen food market will expand along with improvements in the standard of living in other regions.

The global frozen food market has shown solid growth with an expansion rate of 3% per year on average since 2010. In April 2019, we established the Global Frozen Foods Strategy Department to promote the expansion of our business on a global scale. The department formulates strategies for our overseas frozen foods business, and it also engages in efforts such as medium- to long-term technological development, the creation of supply strategies, asset management, and personnel development. The department was renamed the Frozen Foods Business Department in April 2020, which integrated the Japan and overseas businesses and formed a framework for the promotion of growth strategies for frozen foods.

A focus on the Asian food and dessert markets

The Asian food and dessert markets are a particular focus of our initiatives.

The Asian frozen food market (*gyoza* (Japanese-style dumplings), cooked rice (fried rice), *shumai* (Chinese-style steamed dumplings, spring rolls, fried chicken, chow mein, ramen, etc.) is worth US\$ 10 billion (approx. 1.1 trillion yen according to Ajinomoto Co., Inc.'s estimate), and it has grown at a rate of about 5% per year. In November 2014, we acquired the U.S. company Windsor Quality Holdings, LP. This enabled a plan for sustainable business expansion in which, in addition to Ajinomoto Frozen Foods Co., Ltd (FFA)'s *Gyoza* and cooked rice products made with superior technology and quality, we also added noodle products that use the technology and know-how we have cultivated in the U.S. to our major products.

The global frozen dessert market is worth US\$ 5 billion (approx. 0.5 trillion yen, Ajinomoto Co., Inc.'s estimate), and further growth is expected in light of the shortage of workers in the global food service industry (hotels and restaurants). We acquired French company LABEYRIE TRAITEUR SURGELÉS S.A.S. (LTS) in November 2017 and planned the global rollout of high-quality French macarons. This plan also aimed to expand business through the introduction of cakes cut into individual slices, which we are developing for food services in Japan, to food service channels in various countries.



LTS "Macaron parisian girl"

(2) Expansion in North America

Plan to further develop markets centered on frozen foods

Our business in North America began with the efforts of Toyonobu Domen (our 4th President;

see “History” p.5) to establish offices in New York in 1917 and in Los Angeles in 1936. After the postwar lull, the Ajinomoto Co. of New York Inc. opened in July 1956, and direct sales of *AJI-NO-MOTO*® resumed. In the years that followed, the consumer food and bulk amino acid businesses developed as shown below.

- 1977: Launched frozen food products
- 1982: Launched aspartame (amino-acid based high-intensity sweetener)
- 1984: Began local production for feed-use amino acids for animal nutrition (Ajinomoto Heartland, Inc.)
- 2000: Acquired local company GranPac Foods, Inc. and established Ajinomoto Frozen Foods U.S.A., Inc.; began local production for frozen foods

In our FY2011-2013 Medium-Term Management Plan, we decided to further develop our operations in the existing market of North America (improving the market share and profits for major products and developing next-generation core products), with frozen foods as the focus.

In April 2013, the development, marketing, and sales departments of Ajinomoto Frozen Foods U.S.A., Inc. were merged with the Consumer Foods Department of Ajinomoto North America, Inc., which marked the start of integrated management for the consumer foods (seasonings, etc.) and frozen foods businesses. In our U.S. frozen foods business, local staff who understood the tastes of the U.S. consumers took the lead in development, which led to the expansion of this method in the consumer foods business.

Acceleration of consumer foods business through acquisition of Windsor Quality Holdings, LP and corporate restructuring

In November 2014, Ajinomoto Co., Inc. acquired the U.S. company Windsor Quality Holdings, LP for about US\$ 800 million (approx. 87 billion yen) through Ajinomoto North America, Inc. Given that the Asian foods category, which included Japanese foods, had become established in the markets of Europe and the U.S., both advanced regions, we were engaged in efforts to expand our business in these areas by integrating the seasoning and frozen foods businesses. However, it had been less than 10 years since full-scale expansion of the frozen foods business, and compared to the roughly US\$ 40 billion value (approx. 4 trillion yen) of the North American frozen food market, sales were about US\$ 130 million (approx. 13.5 billion yen), which indicated a lack of presence. The acquisition of Windsor Quality Holdings, LP was an attempt to rapidly expand the value of our North American frozen foods business to 100 billion yen.

Windsor Quality Holdings, LP had a large distribution network of about 80,000 stores, including major retailers, in addition to strong food service business infrastructure that could reach about 120,000 restaurants. In FY2013, its frozen foods business had sales of US\$ 670 million. It also possessed seven production sites across the U.S. and boasted the top market share in the Asian foods category, along with strong brands and product groups for Mexican, Italian, and snack products. This M&A enabled our strategy of becoming the clear No. 1 company in the Asian frozen foods category through the combination of our *Gyoza* (Japanese-style dumplings), cooked rice, and other core frozen food products with Windsor Quality Holdings, LP’s retail and food service sales networks. In addition, the company’s business experience, which included world’s most advanced business experience in the U.S. food product market and management experience with a lot of individuals who used to work for global corporations, have enhanced the global management of the Ajinomoto Group.

Afterwards in April 2015, we used this M&A as an opportunity to restructure our North American consumer food business organization. Specifically, we took the following measures:

- A) We turned Ajinomoto North America, Inc. into a holding company and changed its name to Ajinomoto North America Holdings, Inc.
- B) We merged the consumer foods businesses of Windsor Quality Holdings, LP and Ajinomoto North America, Inc. with Amoy North America, Inc., leaving Ajinomoto Frozen Foods U.S.A., Inc. as the surviving company, and changed the name to Ajinomoto Windsor, Inc. (this was renamed to Ajinomoto Foods North America, Inc. (AFNA) in April 2018).



Ling Ling® Chahan
(Fried rice)



Ling Ling® Gyoza
(Japanese-style dumplings)

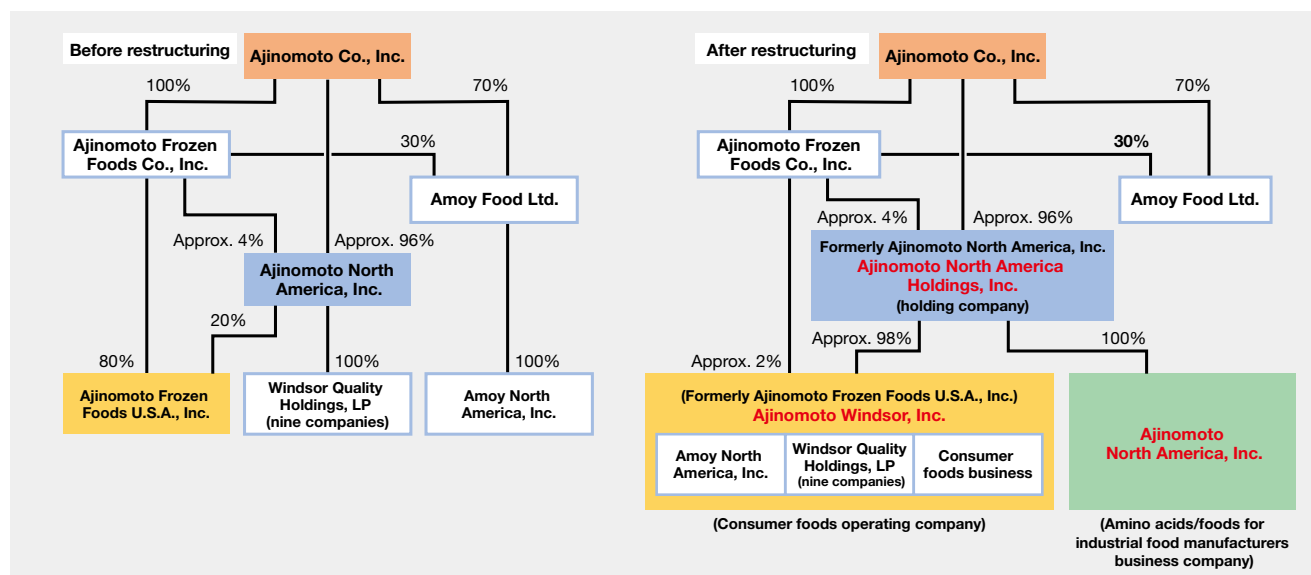


TAI PEI® Beef & Broccoli Han
(Fried rice)

C) We transferred the amino acids and bulk food products businesses of Ajinomoto North America, Inc. to Ajinomoto North America, Inc. that was newly established as a subsidiary of Ajinomoto North America Holdings, Inc (this was renamed Ajinomoto Health & Nutrition North America, Inc. (AHN) in April 2018).

These measures created a system that unified our North American businesses while separating them into the consumer foods business and amino acids/foods for industrial food manufacturers business, as well as allowed us to pursue rapid decision-making, improved efficiency, and synergy in our product development, production, sales channels, and other areas.

Figure I-2: Organizational framework from April 2015 onward



At present, AFNA's product lineup includes *Ling Ling*[®] (*Chahan* (fried rice)), *YAKISOBA* (fried noodles), *Gyoza* (Japanese-style dumplings), *Harumaki* (spring rolls), *TAI PEI*[®] (*Chamen* (fried noodle), *Chicken Harusame* (vermicelli), *Beef & Broccoli Han* (fried rice)), and ramen.

New frozen food factory opened to strengthen food service channels

After the acquisition of Windsor Quality Holdings, LP, we proceeded with updates to the company's aging equipment and made efforts to enhance the production system for frozen appetizer products aimed at food service (fried vegetables, fried cheese, and other fried foods provided as snacks and side dishes). Food service channels comprised about 30% of Ajinomoto Windsor, Inc.'s sales, and frozen appetizers made up 30% of these food service sales. The market was growing dramatically, and it was believed that the two existing factories that handled these products were close to their maximum production capacity.

Thus, in 2017, we invested about US\$ 50.1 million (approx. 5.6 billion yen) into the construction of a new factory in Joplin, Missouri in the U.S. with an annual production capacity of 25,000tons, and it became operational in November of that year. The site of the new factory was about 100,000m², and it had about 12,000m² of total floor space, which secured sufficient space for future increases in production as well. We used the construction of the new factory as an opportunity to introduce technology from Ajinomoto Co., Inc. and Ajinomoto Frozen Foods Co., Inc. to the frozen appetizers domain, and we intend to advance the development and production of specialty frozen appetizer products.

Strengthening the frozen noodles business

Strengthening the frozen noodles business became essential to our expansion of the frozen foods business in North America. The launch of frozen fried noodles in 2007 contributed significantly to the entire business as a growth driver. At the time, there was a Japanese ramen boom in the U.S. and Europe, and because further expansion of the market was expected due to the increase in food services, there grew expectations for the introduction of more technically advanced frozen



AFNA "YAKISOBA"
(Fried noodles)

ramen into the market.

Due to the market situation, we concluded a joint venture agreement with Toyo Suisan Kaisha, Ltd. in 2014 to prepare to establish a frozen noodle production company in North America. Toyo Suisan Kaisha, Ltd.'s participation on the technical side of our North American frozen noodles business led to the creation of Ajinomoto Toyo Frozen Noodles, Inc. (ATFN; the Ajinomoto Group: 80%; Toyo Suisan Kaisha, Ltd.: 20%) in April 2015. A new factory was constructed in July 2016 in Portland, Oregon with an annual production capacity of about 8,600tons. Our goals were to utilize Toyo Suisan Kaisha, Ltd.'s advanced noodle production technology to develop and produce new products, and then use Ajinomoto Windsor, Inc.'s (see p.35) business infrastructure to take the lead in the market.

In October 2016, we launched the frozen noodle product *SHOYU RAMEN WITH CHICKEN* as part of the *AJINOMOTO® TOKYO STYLE* series. In addition to products for supermarkets, we also launched frozen noodle kits for food service at the same time, which aimed to further accelerate the expansion of our business.



ATFN "SHOYU RAMEN WITH CHICKEN"

(3) Expansion in Europe

Restructuring/enhancement of business structure

Our food products business in Europe began with the Paris office that opened in November 1954, after which we relocated our core operations to Western Germany and integrated European sales of *AJI-NO-MOTO®* under Deutche Ajinomoto GmbH (established in October 1961). Expansion continued with a focus on bulk products such as MSG and sweeteners for food manufacturers.

Ajinomoto Poland Sp. z o.o. (APO) was founded in 1999, AJINOMOTO FOODS EUROPE S.A.S. (AFE) in 2002, and AJINOMOTO CONSUMER PRODUCTS EUROPE S.A.S. (ACPE) in 2009. Roles and functions were clarified: AFE handled products for industrial use for all of Europe, while ACPE handled products for consumer use and food service for Western Europe. In the meantime, OOO "AJINOMOTO" was established in Russia in 2004, and while APO merged with a local instant noodles distributor, there was no major change in the business structure.

The structural reform that began after Masatoshi Ito became President & CEO in 2009 entailed a shift towards specialty and the retail business as well as an expansion of the overseas consumer business in terms of growth strategy. This was clarified as the key principle of "Enhancement and expansion of the overseas consumer business" in the FY2011-2013 Medium-Term Management Plan, and Europe was assigned the role of further market penetration and serving as a foothold into the developing markets of Africa and the Middle East, regions that Europe had close ties with historically. To accomplish this, we restructured the system from July to September 2011 to enhance the European consumer foods business.

A) AFE took over ACPE

B) Established AFE London branch

C) APO became a subsidiary of AFE

These three developments comprise the general framework. A) aimed to strengthen the AFE development structure by establishing a product development department within AFE focused on the local market after integrating business management for industrial and consumer use food products¹, thereby further penetrating the market. The goal of B) was to strengthen our sales structure in the U.K., the largest market for ethnic Chinese foods in Europe, and C) was a measure to make APO not only a base for our consumer business in the Eastern European market, but also a supply base for mixed powder seasonings and instant noodles for Western Europe. APO rolled out both the *SAMSMAK®* cup-type noodle series and the *OYAKATA®* and *Yum Yum®* pillow-type noodle series in Europe, a market where the Group's consumer products were scarce.

1. The areas under the purview of AFE (including APO) were the U.K., Ireland, France, Spain, Portugal, Denmark, Germany, the Netherlands, Belgium, Luxembourg, Switzerland, Italy, Poland, the Czech Republic, Slovakia, Austria, Hungary, Slovenia, Estonia, Latvia, and Lithuania.

Further development of markets centered on frozen foods

Just as with North America, frozen foods played a leading role in the further development of the European market. It began in June 2013, when Jawo Sp. z o.o. (headquarters: Czystochowa, Silesia) in Poland began consigned production of frozen *Gyoza* for food service. At the time, the number of Japanese restaurants throughout Europe was on the rise (approx. 8,000 restaurants,

FFA estimate), and *gyoza* continued to spread as a popular menu item. *Gyoza*, fried chicken, and other products from Ajinomoto Frozen Foods (Thailand) Co., Ltd. were exported and sold in the European market starting in 2005, but issues arose, including import restrictions on products that contained pork, customs², and logistics costs. The goal was to quickly begin local production of *Gyoza*, which had the top share in Japan among food products for consumer use, and double sales in the area by FY2016. Jawo Sp. z o.o. was the top manufacturer of frozen pierogi (Polish-style *gyoza*), and both the ingredients and production process for this product were similar to those of *gyoza*, so it was expected that there would be synergy in terms of ingredient procurement, equipment, and so on. However, to supply products with the same quality as those in Japan, FFA lent them a custom line as the primary equipment and provided technical support. Sales were consigned to AFE, which worked to expand sales with a focus on ethnic Asian food service in the U.K., France, and Germany. In October 2014, Ajinomoto Jawo Sp. z o.o. was formed through a merger with Jawo Sp. z o.o. (FFA with a 51% share), which strengthened the organization.

Acceleration of consumer foods business through acquisition of LABEYRIE TRAITEUR SURGELÉS S.A.S.

The European frozen food market expanded to about 41 billion euros (approx. 5.2 trillion yen) in 2015, and the Asian foods category in particular continued double-digit growth. Further, AFE's frozen food business was focused on food service, and the market for consumer use products was virtually unexplored, so it was hoped that this would be sufficient to fuel growth. Thus, starting in April 2016, AFE launched test sales of Ajinomoto Brand frozen food products through major retailers in the Paris area, and in May 2017, it began sales of eight products across France, including *Gyoza* and Japanese cooked rice, through the branch network of major French retailer Carrefour S.A.

In addition, to accelerate the expansion of the frozen foods business, we acquired LABEYRIE TRAITEUR SURGELÉS S.A.S. (LTS) (headquarters: Le Neubourg, France) through AFE in November 2017 for 27 million euros (approx. 3.6 billion yen). LTS was a frozen foods-focused subsidiary of LABEYRIE FINE FOODS S.A.S., a producer and seller of chilled food products that included foie gras and smoked salmon. LTS sold not only high-quality desserts and aperitifs (pie snacks) under the No. 1 French brand "LABEYRIE," but also "Blini" brand products as well as pies, risotto, and other products to major retailers, and it earned annual sales of about 50 million euros (approx. 6.4 billion yen).

Through the acquisition, LTS became the official name, and this enabled A) sales of AFE products through LTS's consumer use sales channels, B) sales of LTS products through AFE's food service sales channels, and C) the expansion of LTS products to regions all across Europe. The synergy between the technological and production foundations of both companies is expected to accelerate growth. LTS changed its company name to Ajinomoto Frozen Foods France S.A.S. (AFF) in April 2018.

2. Dividing the import and circulation of food products in EU into two major categories: animal-based food products and plant-based food products, EU has imposed very strict regulations on food products that contain ingredients derived from animals (conformity with HACCP standards in regard to residue material, manufacturing sites, etc.). Economic Partnership Agreement (EPA) negotiations were underway (formed July 2018, took effect February 2019).



AFF "Gyoza"

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).

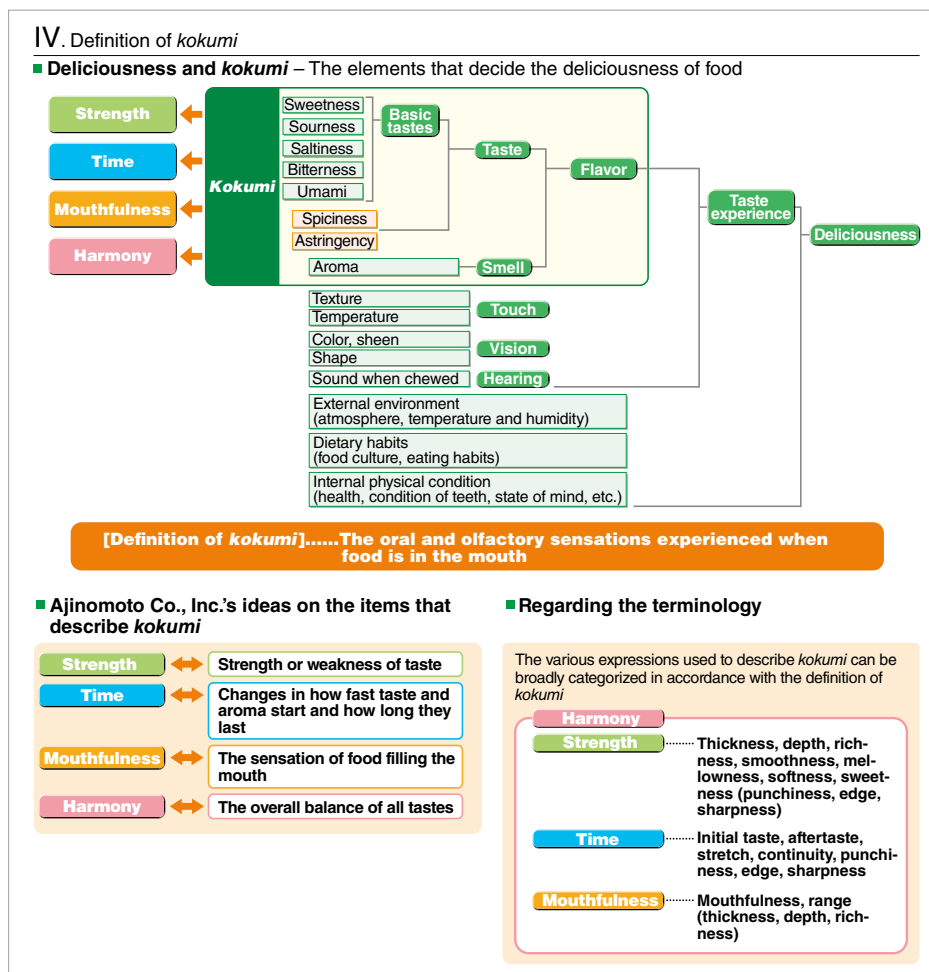
From the FY2014-2016 Medium-Term Management Plan onward, we came up with integrated food solutions based on the concept of the fusion of flavor, taste, and texture, and in order to speed up the expansion of business not only in existing areas, but also growth areas and other new areas, we accelerated 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.

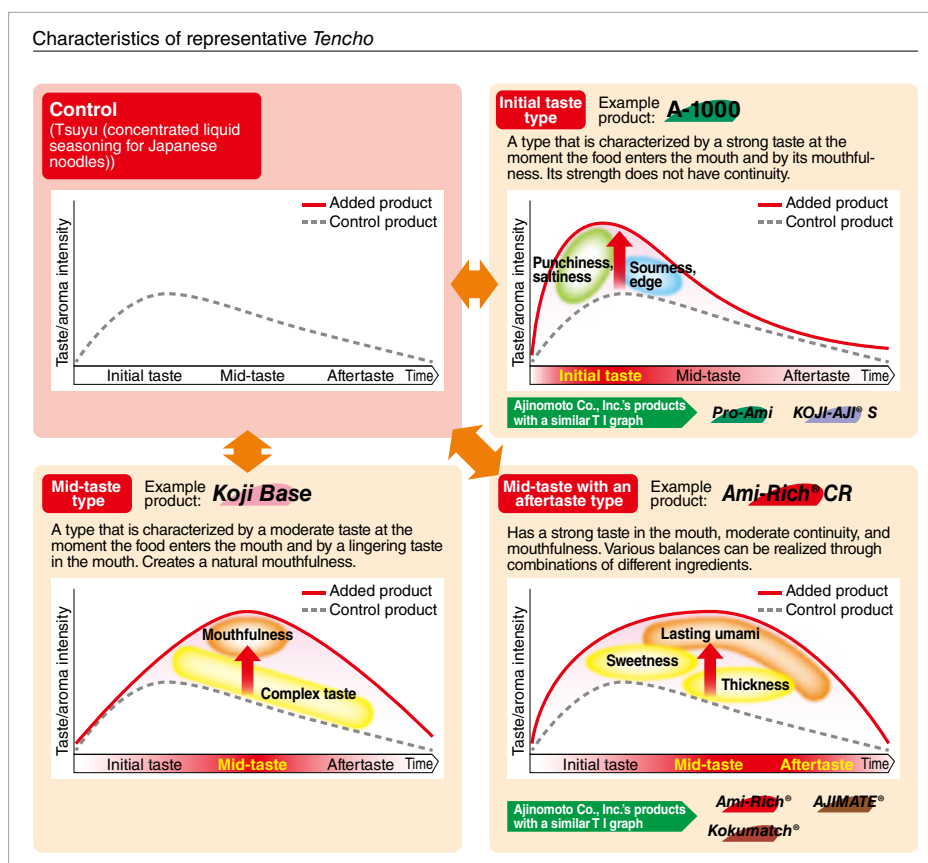
- Japan: Expand sales to key accounts in the food processing industry by strengthening one-to-one engagement with them
Expand sales in the food service field to visualize the market, including individual shops, and launch and promote new products
Expand cultivation of new areas by strengthening collaboration 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 “*ko*,” 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, “*ko*” 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 “*ko*,” 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 except 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 *kokū* 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>kokū</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

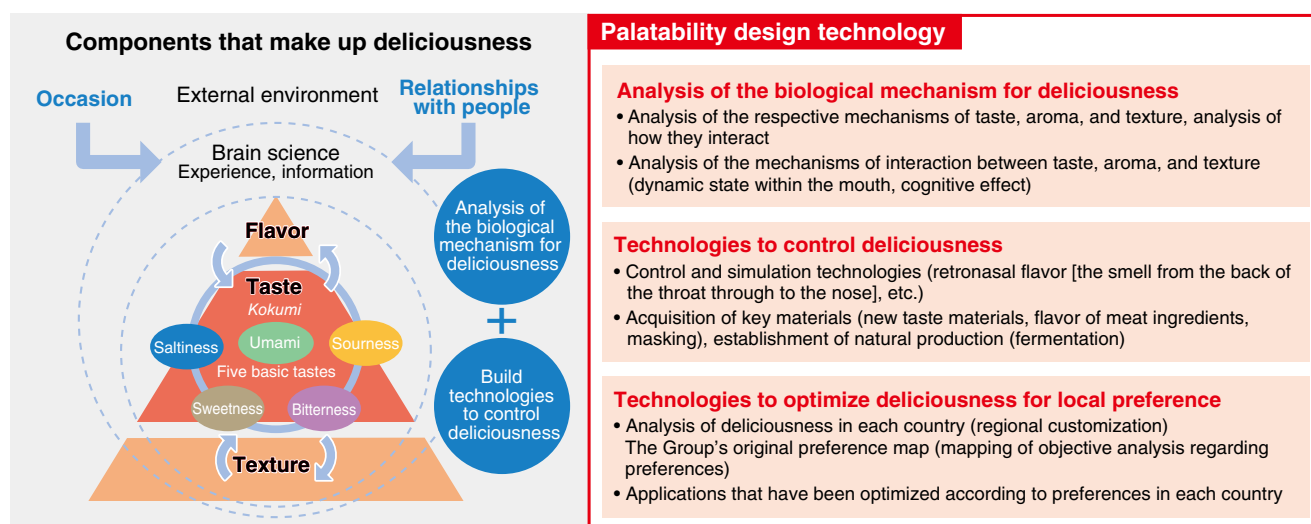
In April 2018, we integrated the Food Ingredients Department and Food Service Department to establish the Solution & Ingredients (S&I) Department with the aim of expanding our business for industrial food manufacturers, food service, and ready-made meal industries. The new department strengthened structures 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 Checkups¹ 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 data¹). 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 interface² (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.

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.

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



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.¹, 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 SPF² pork production in Thailand. Through these initiatives, FFA realized “Reliable Quality³.”

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. 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 Shrimp purchased only from designated suppliers and monitored
Production:	Facilities operated and managed under strict in-house standards Improvement of manufacturing methods to realize best possible taste 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*”[®]

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 series⁴ 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

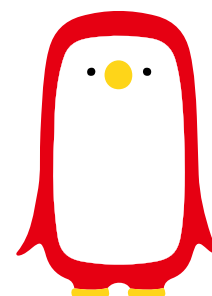
The "*Karada Okazu*" series launched in March 2008 are products that combine an assortment of multiple side dishes in a single bag with a focus on vegetables and FFA marketed them as "side dishes comprising a well nutritionally balanced assortment of ingredients." For example, *5-shu Yasai Irodoriage* 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 filling⁵, 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 ★[®] 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[®] Juicy Hamburg* and *Yoshokutei[®] 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[®] Nikuatsu Hamburg* and *Goronto[®] 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)⁶ 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 4,600m² and a total floor area of around 13,300m², 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[®]" 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[®] 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 refrigerants⁷, 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 CO₂ 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 resources⁸. 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

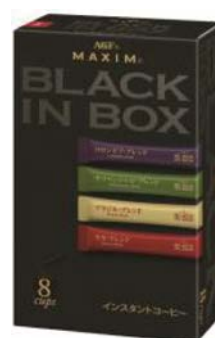
Demand for personal instant coffee products rose due to trends such as individualized diets, smaller households, and the diversification of personal preferences. Accordingly, the use of stick type products, which can be conveniently enjoyed by just adding water or hot water, increased at home, in offices, 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 reorganization⁹ 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.”

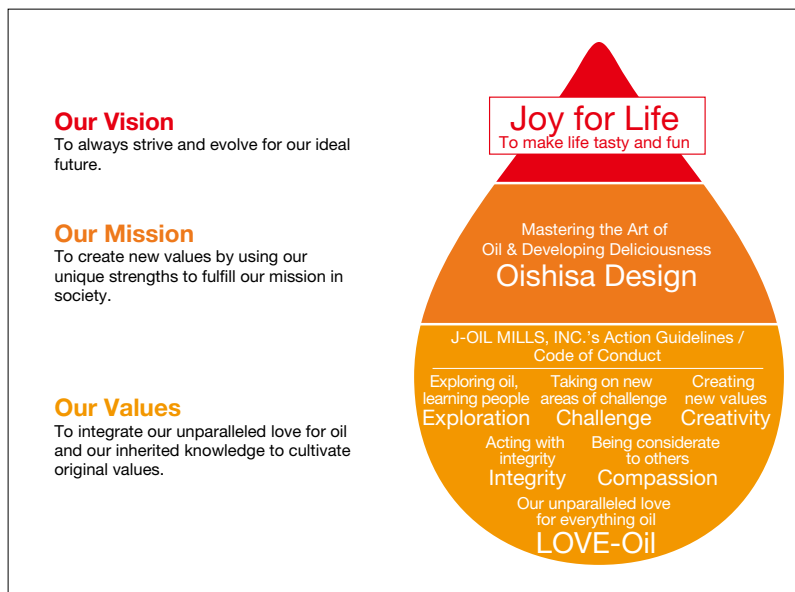
In its third medium-term management plan (2011-2013), amid prolonged deflation in Japan and rises in resources prices, especially international prices for soybeans and canola, which are crucial raw materials for edible oils, it adopted the core policy of “Stability and Growth 2020” which strived to make 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

⁹. 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 Center¹⁰, 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 CO₂ 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 100,000m² 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[®], 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, vegans¹¹, 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[®]

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 CO₂ 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

II

AminoScience Business

1

The Outlines of AminoScience Business

Amino acid-related business development

In FY2009, the Ajinomoto Group's amino acid-related businesses recorded sales of 193.5 billion yen, a year on year decrease of 6.2 billion yen, and a relatively low level of profit with an operating profit of 5.2 billion yen, a year on year increase of 0.2 billion yen. Out of the five fields of feed-use amino acids, amino acids for pharmaceuticals and foods, sweeteners, intermediate pharmaceuticals, and specialty chemicals, the only field performing strongly was specialty chemicals (which included personal care ingredients, *Jino*® brand amino acid cosmetics, and *Ajinomoto Build-up Film*® (ABF) interlayer insulating material for semiconductor packages). In the fields of feed-use amino acids and sweeteners, which involved relatively high ratios of bulk business, factors such as price competition from manufacturers in the U.S., China, and South Korea and the appearance of new competing sweetener products made it particularly difficult for us to compete using our strengths of technological capabilities and marketing.

In the feed-use amino acids business, which had accounted for a large portion of sales and profits in the early 2000's, we were focusing on lysine, threonine, and tryptophan, but factors that included increasing competition led to wild fluctuations in the prices of these products. Therefore, in September 2011, we spun off the business to form Ajinomoto Animal Nutrition Group, Inc. (AANG) and based on the key principle of shifting to "specialty," we strengthened our competitiveness regarding lysine and threonine, which had become commodities, by advancing OEM procurement through an alliance with a Chinese manufacturers, and shifted focus to differentiated products such as *AjiPro*®-L.

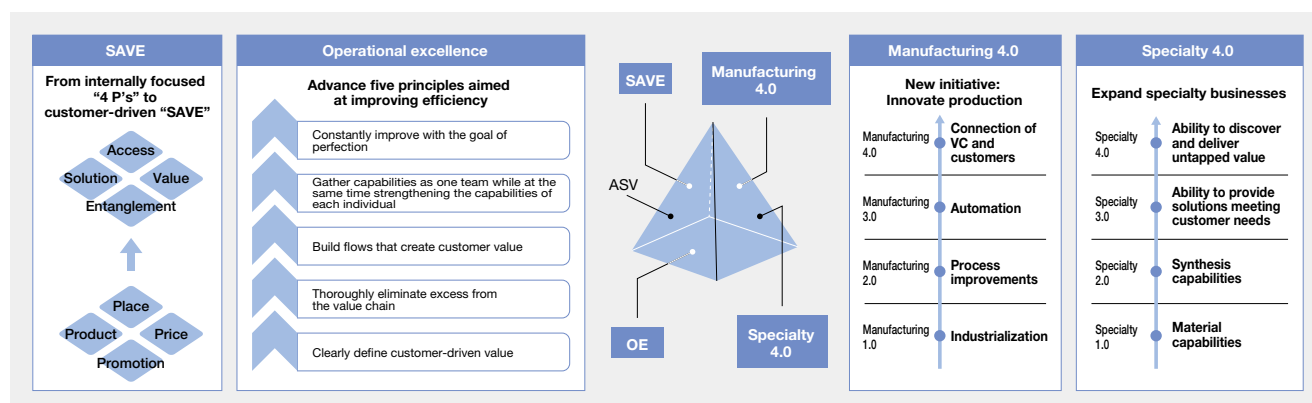
Furthermore, our performance in the amino acids for pharmaceuticals and foods business had been seesawing up to FY2012, but from FY2013 it began trending towards rising sales and profits and provided a support in terms of revenue to our amino acids business, which was undergoing structural reform. In November 2017, we invested 7.2 billion yen to make the U.S.-based medical foods company Cambrooke Therapeutics, Inc. (headquarters: Massachusetts) a full subsidiary and fully entered to market for medical foods targeting patients with amino acid metabolism disorders.

Table II-1: AminoScience business results (FY2009/FY2019)

(Billions of yen)			
FY2009		FY2019	
Sales	Operating profit	Sales	Business profit
193.5	5.2	231.6	19.5

Sources: IR Data Book 2020, INVESTOR'S GUIDE 2017

Figure II-1: AminoScience business strategy pyramid



In the sweeteners business, which is centered on aspartame, we advanced a shift from bulk business to consumer business with a focus on *PAL SWEET*[®] and other products in Japan and *Refresco MID*[®] powdered beverages, which are marketed in South America. As a result of this shift, in FY2015 we moved the sweeteners business to the Food Products Division.

In FY2009, the intermediate pharmaceuticals (custom manufacturing of pharmaceuticals) business was struggling due to factors such as exchange rate fluctuations and declines in sales. However, it began to recover from 2011 and in July that year, S.A. Ajinomoto OmniChem N.V. (Belgium), which plays a central role in the business, established a joint venture company in India (and in August 2019 we announced our plan to take full ownership of this company) as a low cost, high quality custom manufacturing location in order to strengthen business structure. In 2013, we also acquired Althea Technologies, Inc. (headquarters: San Diego) to strengthen applications in the biopharmaceuticals market, including in the growing field of antibody drugs, and from that point onwards we maintained a firm upward trend in revenues. In 2016, we reorganized our structure for the contract manufacturing of nucleic acid drugs from small volume multiproduct production to mass production through the acquisition of GeneDesign, Inc. and we integrated the operation of contract development & manufacturing organizations (CDMO) in four locations – Japan, the U.S., Europe, and India – as “Ajinomoto Bio-Pharma Services” to build a structure for providing global services.

Our full-scale website business began in 1997 through sales of *Jino*[®] cosmetics. In 2005, we leveraged the business model developed through our *Jino*[®] efforts to begin sales of supplements by mail-order, and we then grew this business through advertisements in various media, including newspapers, TV, and websites. In FY2017, we integrated the *Jino*[®] and our proprietary website for direct sales of supplements and from FY2018, we grew in this business area by expanding the products handled to include nutritional care and website exclusive high value food products (examples include seasonings and soups).

Our sports nutrition business, which is centered around the *amino VITAL*[®] series, aims to support conditioning when doing sports by developing unique amino acid compositions and deploying products based on the results of sports nutritional science research focused on sports physiology. We also entered the protein and jelly drink markets, through which we increased contributions to general consumers in a range of sporting scenarios. We have increased our customer base including foreign customers and have expanded the business to cover 10 countries. We have also been enhancing brand value by supporting Olympic and Paralympic athletes at the London, Rio de Janeiro, and Tokyo Games.

In the pharmaceutical peripherals field, in addition to engaging in the nucleic acid and antibody drugs businesses mentioned previously, we also created and developed new businesses in the disease risk evaluating service and pharmaceutical cell culture medium fields. In regard to disease risk evaluating services, in 2011 we launched *AminoIndex*[®] *Cancer Screening (AICS)*[®], a service for analyzing amino acid concentrations in blood that can assess the possibility of whether a person has cancer. Subsequently, we added an *AminoIndex*[®] *LifeStyle Diseases Screening (AILS)*[®] service, which assesses the risk of future strokes, heart attacks, and diabetes to deliver a combined package named *AminoIndex*[®] *Risk Screening (AIRS)*[®]. This service is being provided by almost 1,500 medical institutions across Japan (as of February 2020). The tests can assess the risk of various diseases from a single blood sample, and in addition to being offered as an optional test in medical checkups, it is also being used as an item in local government and corporate health checks. With this service, we are directly contributing to society through our accumulated research into amino acids.

In the specialty chemicals business, while a stagnation in PC demand and other factors since FY2011 have had an impact in the electronic materials field, increased demand for server and communications applications since FY2013 have driven growth. In the personal care ingredients field, recent concern for the global environment has led to sales growth, particularly for amino acid-based surfactants, and both fields have experienced continuous growth. On a different note, since FY2017, *Jino*[®] operations have been the responsibility of the direct marketing business.

As a result of these initiatives, in FY2019, the AminoScience business (which absorbed the sports nutrition, direct marketing, and AminoIndex businesses following the dissolution of the Wellness Business Division in April 2015), achieved sales of 95.3 billion yen and business

Table II-2: Composition of the AminoScience Division

Category	Concept	Strengths	Relevant Businesses
Life support	We realize comfortable lifestyles for consumers and living with the society and the earth through specialty chemicals (electronics materials) business that contributes to the evolution of IoT and animal nutrition business which reduces environmental impact on land and water quality by adjusting the amino acid balance of animal feed.	<ul style="list-style-type: none"> • World-class knowledge of amino acids • Highly safe material development capabilities and synthesis evaluation technology • Global animal nutrition network 	<ul style="list-style-type: none"> • Ajinomoto Animal Nutrition Group Inc. • Specialty Chemicals Department's electronic materials business
Healthcare	We provide a variety of unique materials, active ingredients, and technologies to pharmaceutical, cosmetics, toiletries, and other companies around the world. We also support comfortable lifestyles and improving quality of life for consumers through the provision of fundamental foods and amino acid supplements that leverage our knowledge of amino acid functions and benefits and ability to discover new applications.	<ul style="list-style-type: none"> • R&D capabilities and production technology for amino acids and other areas • Ability to adapt to regulations • Service providing capabilities 	<ul style="list-style-type: none"> • Amino Acids Department • Specialty Chemicals Department's personal care ingredients business • Direct Marketing Department • Sports Nutrition Department • Pharmaceutical Custom Manufacturing Department (renamed as the Biopharma Service Department in April 2020) • AminoIndex Department

profit of 7.1 billion yen in its life support business (animal nutrition and the electronic materials business in specialty chemicals), and sales of 136.3 billion yen and business profit of 12.3 billion yen in its healthcare business (amino acids for pharmaceuticals and foods, pharmaceutical cell culture media, the personal care ingredients business in specialty chemicals, direct marketing [supplements and cosmetics, including *Jino*®], sports nutrition, pharmaceuticals custom manufacturing, and *AminoIndex*®). The sum of both fields produced total sales of 231.6 billion yen and business profit of 19.5 billion yen. This demonstrated slight sales growth of 20% compared to FY2009, but profit was almost four times higher, showing the profitability of moving away from bulk business.

Going forward, we plan to grow sustainably through measures such as the full-scale development of an antibody drug conjugate (ADC) custom manufacturing business and the strengthening of our nucleic acid drugs business in the healthcare field, and expansion into domains adjacent to the electronic materials business (servers, communications applications, etc.) in the life support field.

2

The Animal Nutrition Business

(1) Establishment of Ajinomoto Animal Nutrition Group, Inc.

Establishment of Ajinomoto Animal Nutrition Group, Inc. as a spinoff of the animal nutrition business

The animal nutrition business of the Ajinomoto Group was launched in 1953 and began by selling defatted soybeans for feed, with the business getting fully under way with the establishment of Nippon Amino Feed Ltd. (currently ITOCHU FEED MILLS CO., LTD.) in 1961. The business's main product, lysine, was sold from 1957 for pharmaceuticals as a co-product of MSG. Lysine production using a fermentation process began in 1965 at the Kyushu Plant, later being sold for feed use in September of that year. During this time, the production of tryptophan using a synthetic process began in 1964, followed by threonine production using a fermentation process beginning in 1969. The business grew overseas, expanding into Brazil in 1974, France in 1976 (via a joint venture), the U.S. and Thailand in 1986, and China in 1994 (via a joint venture), establishing a global production system. Our animal nutrition business was always a leader in its three core products (lysine, threonine, and tryptophan). However, in 1991, Archer Daniels Midland Company (ADM), a major U.S.-based grain production company, began producing lysine. This, combined with intensifying competition due to the entry of Chinese and South Korean manufacturers of lysine and threonine, drove business profits down. Following Masatoshi Ito's inauguration as President & CEO in 2009, a plan was launched to shift from bulk business to retail business and to focus on specialties, which also prompted structural reforms for the animal nutrition business.

Ajinomoto Animal Nutrition Group, Inc. (AANG) was spun off in September 2011, taking over our animal nutrition business. Because it became a separate company, it sought to strengthen its readiness towards sudden environmental changes worldwide, practice nimble decision-making, and establish an efficient system for business operation. With a mission to "contribute to more efficient use of limited food resources and achieve harmony with the irreplaceable global environment, contributing to a safe and high quality food supply,"¹ the new company began with a concept focused on not just serving the feed market but also the broader animal nutrition market over the medium- to long-term.

Soon after its establishment, AANG announced its medium- to long-term strategy for its animal nutrition business. The strategy included utilizing new techniques such as resource-saving fermentation technologies and using inedible raw materials to increase production of lysine, threonine, and tryptophan by 2016. It also laid out plans to roll out other feed-use amino acid products such as valine, isoleucine, and *AminoGut*[®], a glutamine formulation to aid piglet growth, as well as to develop and market value-added products such as *AjiPro*^{®-L}, a lysine product for dairy cows and other products to satisfy market needs.

AjiPro^{®-L}, which began production in April 2011, is a high value-added product that solves the problem of lysine breaking down in the first stomach of dairy cows and becoming impossible to absorb through the small intestine. In the feed-use amino acids market, in which product differentiation is generally difficult to achieve, *AjiPro*^{®-L} is an example of successfully creating a specialty and became a top brand among lysine products for dairy cows in North America. In November 2014, a production facility (in Eddyville Plant, Iowa) of U.S.-based Ajinomoto Heartland, Inc. increased production capacity for this product from 1,500tons to 6,500tons annually.

1. Corn and wheat have a lower lysine content than soybean meal. In general, the lysine content of 50kg of soybean meal is equal to that of 48.5kg of corn plus 1.5kg of lysine. Since the harvest volume of corn per unit area is much larger than soybeans, using lysine for animal feed allows for efficiently supplying soybeans and corn. Protein content in feed is also reduced, contributing to lower metabolic fecal nitrogen emissions, which in turn reduces levels of nitrous oxide, a greenhouse gas that has a global warming potential 298 times higher than CO₂.

In response to a FY2013 business performance slump owing to competitors lowering prices, the FY2014-2016 Medium-Term Management Plan laid out plans to shift further towards being a specialty business while strengthening our competitiveness.

Making improvements to a business structure spanning five areas worldwide

AANG continued to make organizational reforms.

In April 2013, Ajinomoto Animal Nutrition (Singapore) Pte. Ltd. was established to serve as a regional headquarters. This was almost two years before the establishment of Ajinomoto SEA Regional Headquarters Co., Ltd. (in January 2015), and the company became a center for quick and precise decision-making and business management in the Asia-Pacific region, a place of top-level growth and intense competition. Then in 2018, Ajinomoto Heartland, Inc. was renamed to Ajinomoto Animal Nutrition North America, Inc. in April, followed by the renaming of AJINOMOTO EUROLYSINE S.A.S. to AJINOMOTO ANIMAL NUTRITION EUROPE S.A.S. in October. This solidified production and sales functions for our animal nutrition businesses in North America and Europe. With this move, in areas other than South America, where AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. was in charge of sales, AANG established regional headquarters to handle business management and enable a speedy response.



Ajinomoto Animal Nutrition North America, Inc.



AJINOMOTO ANIMAL NUTRITION EUROPE S.A.S.

(2) Building a system for flexible production and cost reduction

Restructuring the production system in China

As our animal nutrition business was being spun off in 2011, efforts began to restructure our production system. The structure that we had been concentrating investment into and that expanded through the mid-2000s had to be capable of responding to the commoditization and price decline of lysine and threonine as Chinese and South Korean manufacturers became stronger competitors. This was done to better position us for developing specialties.

In November 2010, Ajinomoto Co., Inc. conducted a gratuitous transfer of its entire holdings (70% share) in CHUANHUA AJINOMOTO CO., LTD. (Chengdu, Sichuan), a joint venture that had been producing lysine in China, to a joint venture partner SICHUAN CHEMICAL WORKS GROUP, LTD., a local chemicals manufacturer. Although CHUANHUA AJINOMOTO CO., LTD. expanded its production facilities for feed grade lysine in 2005 and boosted annual production capacity to 32,000tons, pressured by lower-priced local products, production was halted in the fall of 2008. After this, AJINOMOTO CO., (THAILAND) LTD. continued supplying feed grade lysine in China.

In March 2011, efforts were launched to sell feed grade threonine produced by Inner Mongolia Fufeng Bio-technological Co., Ltd. (based in the Hohhot Economic and Technological Development Zone) of Fefeng Group. under the Ajinomoto Brand. Under an agreement signed in November of the previous year, we began selling locally produced threonine, changing the previous system of importing threonine from the Group companies in the U.S. and France, and rebuilt our business platform in the highly competitive Chinese market. Then in August 2017, through AANG we signed an agreement with Meihua Holdings Group Co., Ltd. (based in the Langfang Economic & Technical Development Zone, Hebei), a large Chinese manufacturer of amino acid-related products, to have it manufacture feed grade lysine and threonine. From

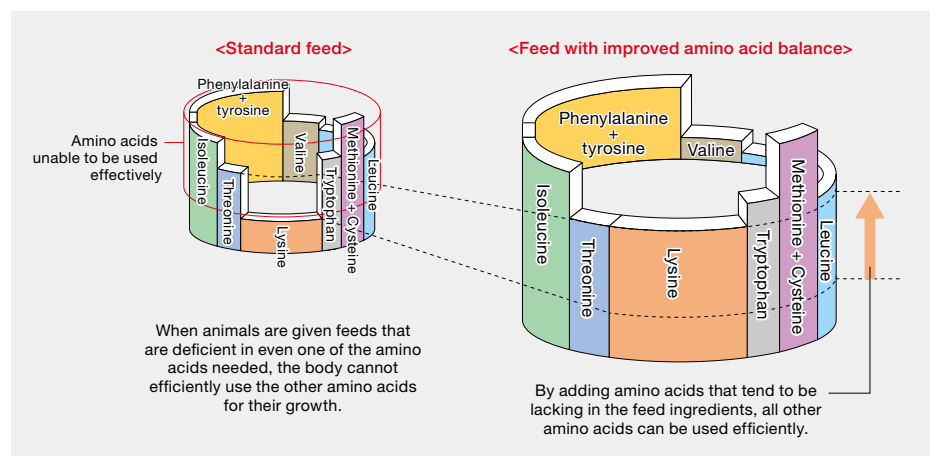
FY2018 on, AANG exported both of the company's products to the global market and began sales of Ajinomoto Brand products through sales companies in each market. With the discontinuation of in-house production in China and entrusting of production to two local companies, AANG now had a system for steadily shifting away from in-house lysine and threonine production to outsourcing in all regions globally, while promoting and accelerating further structural reform.

Increasing production for feed grade tryptophan in the U.S. and Europe

Meanwhile, tryptophan became central to AANG's efforts to shift from lysine and threonine. Feed grade tryptophan had long been produced by only two companies, the Ajinomoto Group and Germany-based Evonik Industries AG, which together controlled 80% of the global market. South Korea entered the market in 2010, but we made efforts to increase tryptophan demand, which succeeded in increasing demand by about 40% over five years. Because of this, in December 2014 AANG began expanding the Amiens Plant of France-based AJINOMOTO EUROLYSINE S.A.S. (currently AJINOMOTO ANIMAL NUTRITION EUROPE S.A.S.), formerly the only producer of tryptophan within the Group, completing construction in May 2016. This enabled the plant to increase its annual tryptophan production from 4,500tons to 7,500tons. Along with the expansion, we deployed new resource-saving fermentation technologies, successfully shared facilities for producing other products (lysine, threonine, and valine), and paved the way for expanding production capacity in the future with minimal investment.

In May 2017, we then began tryptophan production (3,000tons/year in production capacity) at U.S.-based production facility Ajinomoto Heartland, Inc.'s (currently Ajinomoto Animal Nutrition North America, Inc.) Eddyville Plant in Iowa.

Figure II-2: Results of amino acid balance improvement



(3) Patent lawsuit related to animal nutrition

Lysine lawsuit against Hong Kong-based Global Bio-Chem Technology Group Co. Ltd.

Because the animal nutrition business is an area where production technologies factor heavily into competitiveness, intellectual property protection has been a vital endeavor for the business.

In July 2013, Ajinomoto Co., Inc. together with France-based AJINOMOTO EUROLYSINE S.A.S. (currently AJINOMOTO ANIMAL NUTRITION EUROPE S.A.S.) filed a lawsuit for infringement of a lysine manufacturing patent with the Hague District Court in the Netherlands against Hong Kong-based Global Bio-Chem Technology Group Co. Ltd. (GBT) and three of its subsidiaries (the GBT Group). The GBT Group had already received injunctions against the sale of these products on three counts of patent infringement by courts across Europe. An analysis of products for which it had resumed sales on the basis of non-patent infringement found that the products in fact infringed on another patent, and we filed a motion to have the GBT Group suspend lysine sales, recall all sold products, and pay damages. In the same year, the judicial decision of the Supreme Court of the Netherlands regarding our patent infringement lawsuit

against the GBT Group in 2006 became final and binding in our favor. We also received a successful ruling by Germany's Federal Court of Justice as the GBT Group failed to appeal.

In the above-mentioned trial filed in 2013, although the first trial resulted in finding our patents invalid, this initial ruling was overturned via an appeal hearing in September 2016, confirming our victory. The final ruling prohibits the GBT Group from engaging in such actions as selling, using, or importing the infringing products in the Netherlands until the patent expires in 2025.

Both domestically and internationally, this series of victories in the lysine lawsuit made clear the uniqueness of our production technologies and stance on intellectual property protection.

Tryptophan patent infringement lawsuit in the U.S. and Europe

After the spin-off of the animal nutrition business, there was also a lawsuit concerning patent infringement for feed grade tryptophan, on which AANG had been focused.

In May 2016, Ajinomoto Co., Inc. together with U.S.-based Ajinomoto Heartland, Inc. (currently Ajinomoto Animal Nutrition North America, Inc.) and AJINOMOTO EUROLYSINE S.A.S. (currently AJINOMOTO ANIMAL NUTRITION EUROPE S.A.S.) filed a lawsuit for infringement of a tryptophan manufacturing patent with the U.S. International Trade Commission (ITC), the U.S. District Court for the Southern District of New York, and Germany's District Court of Düsseldorf against CJ CheilJedang Corporation and three of its subsidiaries (the CJ Group). The CJ Group had been manufacturing tryptophan at its Indonesian subsidiary and selling the product to a number of countries. Based on the finding that the CJ Group's manufacturing method infringed on our patent, we filed a motion against the CJ Group to cease the sale of infringing products and pay damages for products already sold. We also filed a similar patent infringement lawsuit concerning MSG production in August against the CJ Group.

In the U.S., a December 2017 ruling by the ITC found the CJ Group to have infringed on two of our patents, after which the CJ Group was prohibited from importing the infringing products. Ajinomoto Co., Inc. appealed the finding that a part of the strains used by the CJ Group did not infringe, while the CJ Group appealed the finding that certain strains did infringe. The ITC's ruling was then upheld by an appeal hearing ruling in August 2019 (the CJ Group has requested a final appeal with the U.S. Supreme Court). In Germany, Regional Court Düsseldorf issued a favorable ruling for us in February 2018, effectively prohibiting the CJ Group from selling tryptophan in Germany and from importing or selling infringing products to Europe through the CJ Group's German subsidiary, CJ Europe GmbH. This initial ruling was upheld in an appeal hearing ruling in October 2019 (the CJ Group is currently requesting a final appeal with Germany's Supreme Court).

3

The Specialty Chemicals Business

(1) Chronicle of the specialty chemicals business

Specialty chemicals business timeline

The following are the chief milestones achieved by the specialty chemicals business of the Ajinomoto Group.

- 1935: Established Takara Pharmaceutical Ltd. as a fully owned subsidiary (manufacturing lubricants for aircraft)
- 1942: Established joint venture company Nippon Specialty Oil Manufacturing Co., Inc. (on the grounds of Ajinomoto Co., Inc.'s Kawasaki Plant; renamed to Sanko Co. and became a fully owned subsidiary in 1946) (manufacturing lubricating oil for aircraft)
- 1946: Began production of insecticide DDT (Sanko Co.)
- 1950: Began production of paraffin wax-based flame retardant *Empara*® (Sanko Co.)

Thereafter, specialty chemicals business was carried out by three organizations:

Ajinomoto Co., Inc. headquarters, Takara Industries Ltd. (renamed from Takara Pharmaceutical Ltd. in 1964; conducted amino acid raw material packaging business), and Sanko Co. Following our development of amino acid-related technologies, new products were marketed up through the 1980s as listed below. These products are connected to our current product lineup.

- 1966: *EPOMATE*® epoxy resin hardener
- 1969: *AJICOAT*® polyamino acid resin (synthetic leather)
- 1971: *AJIDEW*® amino acid-based moisturizer
- 1972: *Amisoft*® amino acid-based surfactant
- 1973: *Minon*® weakly acidic amino acid-based cosmetic using *Amisoft*® technology (marketed by Yamanouchi Pharmaceutical Co., Ltd. (currently Daiichi Sankyo Co., Ltd.))
- 1982: *PLENLIZER*® ST series of vinyl chloride resin stabilizers from Sanko Co.
- 1988: *PLENSET*® one-component epoxy adhesive

Products launched in the 1990s included the *Eldew*® emollient oil, *Marinedew*® conditioning agent, *Amilite*® and *Aminossoap*® amino acid-based surfactants, and *Softshade*® UV absorber. The *JINO*® series of Ajinomoto Brand cosmetics based on amino acids were launched in February 1997 and were sold exclusively via mail order.

Establishment and growth of Ajinomoto Fine-Techno Co., Inc.

In October 1998, Ajinomoto Co., Inc. restructured the specialty chemicals business by integrating the specialty chemicals group at its headquarters with Sanko Co., which was renamed to Ajinomoto Fine-Techno Co., Inc. (AFT). Before this, from 1995 the specialty chemicals group had been developing an electronic material (for printed circuit boards) that utilized polymer technologies, and developed an original material for resists for tape automated bonding (TAB) that was used in liquid crystal displays and a liquid-based interlayer insulating material for printed circuit boards (PCBs). Moreover, *Ajinomoto Build-up Film*® (ABF) launched in 1999, an interlayer insulating material for semiconductor packages that rectified the drawbacks of liquid-type PCBs, were used in the central processing units (CPUs) of Windows PCs,



Distant view of Ajinomoto Fine-Techno Co., Inc.

which swept the world, and became the de facto standard in interlayer insulating materials for semiconductor packages.

AFT later merged with Hokuetsu Carbon Industry Co., Ltd. (headquartered in Tsurumi-ku, Yokohama-shi) in 1999, to add the activated carbon¹ business, and has developed businesses in four areas, including electronic materials, industrial adhesives, and functional chemicals. It also bolstered its development and production structures with the establishment of Techno Center 1 and 2 (2000 and 2008) and the Gunma Plant (2007, in Showa-mura, Tone-gun).

1. Activated carbon has been used in the purification of MSG since the 1930s, and its main application is the same within the Group even now.

Personal care ingredients business

Following the renaming of the Takara Industries Ltd. to Ajinomoto Takara Corporation, Inc. in 1989, the personal care ingredients business took over such operations as the sales of amino acids for pharmaceuticals, feed-use amino acids, and personal care ingredients from Ajinomoto Co., Inc. in Japan. Ajinomoto Takara Corporation, Inc. was renamed to AJINOMOTO HEALTHY SUPPLY CO., INC. (AHS) in 2005.

Specialty chemicals business development and overseas business expansion

In the FY2011-2013 Medium-Term Management Plan, the specialty chemicals business laid out two basic objectives: (1) in electronic materials, find new applications for *ABF*, an interlayer insulating material for semiconductor packages, and foster new businesses, and (2) in personal care, expand business scale by fostering major brands (retail business) and grow sales in emerging countries (personal care ingredients business). These objectives were succeeded in the period of the FY2014-2016 Medium-Term Management Plan, in which the personal care ingredients business aimed to accelerate overseas expansion with a focus on Southeast Asia and Latin America, and overseas production.

(2) Ajinomoto Fine-Techno Co., Inc.

Overseas business expansion of Ajinomoto Fine-Techno Co., Inc.

In line with the specialty chemicals business's focus on overseas business expansion, AFT, in charge of electronic materials business, established Ajinomoto Fine-Techno USA Corporation (a fully owned subsidiary) in California in 2015, bolstering its ability to act on the latest trends in Silicon Valley. It also focused on new product development: upon completing construction on a new headquarters annex in Kawasaki in 2016, it built the AFT Future Creation Center (AFCC) to promote open innovation, positioning the center as a place for developing new applications and businesses together with customers.



AFT Future Creation Center

Finding new applications for *Ajinomoto Build-up Film*® (*ABF*)

ABF, an interlayer insulating material for semiconductor packages, is a core product of AFT, which handles electronic materials business. The material is a solution to the problems specific to a liquid-based material, i.e. that it can only work with the one side of the substrate at a time, it is difficult to fill in gaps between lines with it, and it readily adheres foreign materials to the surface. *ABF* was adopted in PC CPUs, which rapidly grew in performance while shrinking in size beginning in the 1990s, and it saw further improvements thereafter, boosting business performance.

Moving into the 2010s, while the wide spread of tablets and smartphones led to a decline in demand for PCs, *ABF* demand skyrocketed as the number of servers for use in data centers grew². *ABF* has since expanded even beyond servers to things like communications networks and video game consoles, making it a strong-performing product even in FY2019.

AFTINNOVA®, a next-generation performance material

While pursuing new applications for *ABF*, AFT has also been working to develop *AFTINNOVA*®, a series of next-generation performance materials.

AFTINNOVA® *Encapsulation Film* (*AEF*), a product in this series, is an encapsulant for Organic Electroluminescence Displays (OLEDs), which are replacing fluorescent lights and

2. The wide spread of information devices such as smartphones and tablets, along with social media and video sites, is prompting a greater need for the ability to process large amounts of data faster, spurring development of high-performance networking devices. With semiconductor products at the heart of these devices, *ABF* is finding wider adoption for its ability to satisfy demand for larger capacities, higher-speed data transmission, and greater multi-layering in these products.

light bulbs and are finding wider adoption in flat-panel displays as a successor to liquid crystal displays. This encapsulant is used to protect organic electroluminescence elements, which are vulnerable to moisture. *AFTINNOVA® Magnetic Film (AMF)* is a magnetic film material that lessens CPU power consumption. As this material must be both magnetic and insulating, we are working in tandem with major manufacturers to provide these features and satisfy customer needs.

(3) Personal care ingredients business

Overseas expansion of the personal care ingredients business

It is becoming a trend, especially in Europe, to use natural raw materials from plants that are both environmentally friendly and gentle on human skin. The result is growth in demand for personal care ingredients made with amino acids, and we are utilizing the sales network of the Group and expanding business worldwide in response. In February 2013, we established PT LAUTAN AJINOMOTO FINE INGREDIENTS (LAFI, located in Bekasi) as a joint venture with PT Lautan Luas, a listed chemical company in Indonesia. LAFI's purpose was to produce personal care ingredients (amino acid-based surfactants *Amisoft®* and *Amilite®*) in Indonesia, which is rich in raw materials such as palm oil, the main ingredient in personal care ingredients. Because of the start of operations at LAFI's plant in March 2014, the Group had increased the total supply capacity by roughly 30%, which includes the use of existing equipment at the Kawasaki/Tokai Plant and the Limeira Plant (producing mainly moisturizers) in Brazil.

In June 2019, we made the decision to construct a new plant for the production of amino acid-based surfactant *Amisoft®* (liquid), a mainstay product made using personal care ingredients, within the grounds of AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA.'s Pederneiras Plant. Operations are slated to begin within 2020. This will increase the Group's production capacity of amino-acid surfactants by 60%.

Meanwhile, we built a laboratory for personal care ingredients at AJITRADE (THAILAND) CO., LTD.'s Ajittrade Cosmetics Application Center (ACAC), which is gaining more customers by providing services that meet their needs, including formula development and evaluation, as well as manufacturing prototype products. Through these activities, we have put together a sales network of more than 5,000 companies in 55 countries (as of 2019) for amino acid-based personal care ingredients. AHS has also played a role, building the Tokyo Customer Development Center (TCDC), where it conducts new business development, when AHS relocated its headquarters to Kyobashi, Tokyo in 2017.

(4) Cosmetics business

JINO®, an original cosmetics brand, on the market for more than 20 years

JINO®, one of our specialty chemicals businesses, is an original brand of amino acid-based cosmetics that was launched in February 1997. This series of skincare products (facial washes, toners, emulsions, and creams), which possesses a unique characteristic sufficiently differentiated from competitive products – containing an abundant and diverse array of amino acids – were promoted via direct marketing (mail-order sales). After that, the cosmetics business was developed as follows:

- 2007 Began directly managed store sales (two stores in Kanto and one in Kansai, as of 2019)
- 2009 Launched *L'ACTUA®*, a brand that contains both amino acids and ingredients from lactobacillus, aimed at younger consumers (discontinued in 2014)
- 2010 Began selling *APIVITA®*, a natural cosmetics brand from Greece (discontinued in 2013)

Through *JINO®*, a precursor to our direct marketing business, we acquired a diversity of customer communication expertise, which included a strategy for attracting customers unique to direct marketing, trial kits and follow-up tools that gained us loyal customers, and the customer-communication know-how at our call center. Numerous campaigns were conducted in February 2017 to mark the 20th anniversary of *JINO®*'s launch. *JINO®* business was then transferred to

the Direct Marketing Department in April 2017, and it began selling the series in addition to its amino acid supplements.



JINO®

4

The Amino Acids Business Focusing on Pharmaceutical Peripheral Area

Full-scale production of amino acids for pharmaceuticals and foods in China

In addition to infusion solutions and medical foods, amino acids began finding use in various kinds of pharmaceuticals, drinks, health foods, and supplements. The Ajinomoto Group built a global supply structure consisting of facilities in Henan (March 1997 via joint venture) and Shanghai (February 1998 via joint venture) in China, and in Brazil (February 2005).

Demand for amino acids for pharmaceuticals and foods continued to grow since then: an annual demand in 2005 of 17,000tons hit 30,000tons around 2012, and was expected to grow further. Based on this, we made the decision to boost production capacity at Shanghai Ajinomoto Amino Acid Co., Ltd. in March 2013, allowing it to begin supplying amino acids in October 2013.

Conducting wellness business

Based on research into involving amino acids and related areas, we have been expanding specialty bulk businesses that solve health issues in Japan and overseas. In Japan, the business leverages the brand power of amino acid mix (e.g., *Amino L40*®), providing customers with product design solutions in order to strengthen its downstream strategy (brand + inside strategy), which involves giving a variety of amino acid functions to foods. Furthermore, using the taste-improving function of polyglutamic acid (a long chain of amino acids), the main ingredient in the sticky strings of *natto* (fermented soybeans), the business is working with packaged food manufacturers, academic societies, experts, and governmental organizations to expand its usage of reduced-sodium foods.

Overseas, the business has launched supplement products¹ such as *CAPSIATE NATURA*™ (launched in July 2007; currently named *CAPSIATE GOLD*™ (launched in June 2015), followed by *Glysom*® (2010) and *amino DEFENSE*® (2013). These products were launched through clinics in the U.S., which put an emphasis on scientific evidence and safety with respect to health materials. To resolve food and health issues in overseas markets, the business makes a global effort to promote its downstream strategy, which centers on *Amino L40*®. The multipronged strategy aims to transition from the supplement market to the food category, and from retail business to specialty bulk business.



Amino L40® logo

1. In 2012, *CAPSIATE NATURA*™ and *Glysom*® were chosen as items in gift bags given to Academy Award nominees. The gift bags, which contain famous and soon to be famous products, are a hot topic every year among celebrities in the U.S.



CAPSIATE GOLD™



Glysom®



Amino DEFENSE®

The U.S. medical food business: Cambrooke Therapeutics, Inc. became a subsidiary

In November 2017, we, through Ajinomoto North America, Inc., acquired the U.S.-based medical foods company Cambrooke Therapeutics, Inc. (headquartered in Massachusetts) as a fully owned subsidiary with an investment of roughly \$64 million (about 7.2 billion yen). Cambrooke Therapeutics, Inc. founded in 2000 deals in medical foods and low-protein foods for patients with amino acid metabolic disorders, ketogenic diet foods for patients with intractable epilepsy, medical foods for patients with protein allergies, and high-calorie foods for patients suffering from undernourishment due to conditions such as cancer or cystic fibrosis. The company supplies products to Europe and nations around the world, and has achieved continued growth with products more delicious and higher functional than competitors', with a focus on utilizing unique ingredients and practicing evidence-based product development.

The U.S.'s medical foods² market was \$1.75 billion as of 2016 (about 198 billion yen), the largest in the world, with an average annual growth rate of about 10%. The U.S.'s medical foods market for patients with metabolic disorders accounted for about 40%, or \$660 million of this total (about 75 billion yen), and was estimated to have grown by 10% annually.

We, a seller of amino acids as ingredients for the medical foods market, have focused on the fact that medical foods lack in good taste and variety even though the patients with metabolic disorders can only eat the medical foods. As part of this focus, we made a full-scale entry into the medical foods market with the acquisition of Cambrooke Therapeutics, Inc., which underwent a name change in April 2019 to Ajinomoto Cambrooke, Inc.

The aim of this endeavor is to utilize scientific knowledge concerning the nutritional and physiological functions of amino acids, along with "deliciousness technologies" and food application technologies, in Ajinomoto Cambrooke, Inc.'s business in order to provide patients with a greater variety of more delicious foods. In addition, by expanding the range of targeted diseases and strengthening operations outside Japan using our sales channels, the company seeks to achieve sales of roughly \$90 million (about 10 billion yen) in 2027 and a global market share of 20% in the market for medical foods targeting those with metabolic disorders.

Furthermore, as a mutually beneficial synergy, we will put knowledge gained from Ajinomoto Cambrooke, Inc.'s medical foods business to use in our food-related businesses in Japan and overseas, including quick nourishments and supplements, and increase its lineup of high value-added health and nutrition products.



Distant view of Cambrooke Therapeutics, Inc.

2. Classified by the Food and Drug Administration (FDA) as foods that fall between pharmaceuticals and dietary supplements and that are covered by insurance.



Ajinomoto Cambrooke, Inc. customers

Ajinomoto Cambrooke, Inc.'s medical foods product lineup



GLYTACTIN™ series



GLYTACTIN BUILD™



KetoVie® series



Pharmaceutical cell culture media business

The cell culture media for regenerative medicine business is another business that has made much progress in recent years.

In August 1987, utilizing production technologies for highly purified amino acids, we began selling *Ajinomoto Serum Free (ASF) Media* series of serum-free media for culturing animal cells. Cell culture media are nutrition solutions for growing and proliferating cells, and *ASF Media* contain no substances derived from animal extracts, preventing contamination. These media are also widely used in Japan and overseas as research reagents for biopharmaceutical production applications due to their superior cell proliferation performance (on par with serum culture) in Chinese hamster ovaries (CHO cells) and hybridoma cells, which are often used for biopharmaceutical production. *ASF Media* also feature high monoclonal antibody³ productivity in all cultivation forms, while also making it easier to refine product material with a consistent quality.

In November 2012, we established Ajinomoto Genexine Co., Ltd. (35.7 billion won in capital (about 2.5 billion yen), funded 75% by Ajinomoto Co., Inc.) through a joint venture with Genexine Co., Ltd. (headquartered in Seongnam, Gyeonggi-do) in South Korea, one of the world's largest markets for cell culture media. The company built a new plant in Incheon Free Economic Zone Songdo Area, South Korea and began production operations in July 2014. Using a production and quality control system compliant with Good Manufacturing Practices (GMP; production and quality standards established by the U.S. Food and Drug Administration (FDA)), the plant began supplying high quality culture media for animal cells used in the production of biopharmaceuticals.

Supporting regenerative medicine in cell culture media development for iPS and ES cells

Using proprietary analysis technologies and expertise in formulations, we also began developing cell culture media for iPS and ES cells. Both cells are multipotential stem cells (pluripotent cells) that can be differentiated into any cells, and are key to regenerative medicine.

In collaboration with the Center for iPS Cell Research and Application, Kyoto University (CiRA led by Professor Shinya Yamanaka⁴), we embarked on the development of safer cell culture media for iPS and ES cells that contain no ingredients derived from animals or humans. Conventionally, iPS cells have been cocultured with mouse cells called “feeder cells” in a culture medium containing bovine serum.

These efforts bore fruit in the form of *StemFit® AK03*, a cell culture medium for iPS and ES, in February 2014. This medium, which uses a recombinant protein made with biotechnologies, can stably proliferate iPS and ES cells for long periods by bringing together our analysis and formulation technologies with expertise and research findings concerning iPS cells from Kyoto CiRA, and by achieving the optimal mix of factors needed for cultivation.

Along with providing the *StemFit® AK03* to HEALIOS K.K., which became the first in the world to develop a therapy for age-related macular degeneration that involves transplanting retinal pigment epithelial cells derived from iPS cells, Ajinomoto Co., Inc. commercialized the following products in the course of continued industrialization research and development.

October, 2015	Launched ⁵ <i>StemFit® AK02N</i> , a cell culture medium for basic research
July, 2016	Launched <i>StemFit® AK03N</i> , a cell culture medium for clinical research
September, 2016	Launched ⁶ <i>StemFit® Basic02</i> , a cell culture medium for basic research developed for the global market based on <i>StemFit® AK02N</i> , intended for research institutes in the U.S., the global market leader

3. Antibodies obtained from clones derived from single antibody-producing cells. Accounting for roughly 30% of all biopharmaceutical products, they possess a high consistency and effectiveness due to the fact that they use the body's immune system to attack the target (antigen) when they bond with it.

4. Winner of the 2012 Nobel Prize for Physiology or Medicine for his discovery of iPS cells.

5. Outsourced sales to ReproCELL Inc. and Takara Bio Inc.

6. Sales were conducted using distributors. (<https://www.ajitrade.com/stemfit/distributors/>)



StemFit®

5

The Bio-Pharma Services Business

Chronicle of the pharmaceutical intermediates business

The Ajinomoto Group planned to get into the pharmaceutical intermediates business¹ using technological expertise cultivated through the development of amino acid and nucleotide manufacturing. In October 1989, we acquired Belgium-based contract development and manufacturing organization S.A. OmniChem N.V., then built a co-development structure with European and U.S. pharmaceutical companies, beginning full-scale business operations in the 1990s. In April 2004, S.A. OmniChem N.V. and AJINOMOTO EUROPE S.A.S were merged to create a system with integrated manufacturing and sales functions in the form of S.A. Ajinomoto OmniChem N.V. We also augmented our production facilities at the Tokai Plant in Japan.

Later, the business was thrust into a period of stagnation and recorded an extraordinary loss for the Tokai Plant equipment in the first half of FY2010. However, despite the 2010 problem (all large pharmaceutical patents expired at once around 2010, significantly impacting numerous pharmaceutical companies), decreased healthcare costs, and a drop in the number of new drugs approved, the production outsourcing trend saw no changes at large pharmaceutical companies.

To achieve contract manufacturing at low cost, in September 2011 S.A. Ajinomoto OmniChem N.V. established a joint venture company Granules OmniChem Private Ltd. with Granules India Ltd. (headquartered in Hyderabad), which manufactures and sells active pharmaceutical ingredients and pharmaceuticals in India. The new company began production at a new plant in the Visakhapatnam Special Economic Zone in Andhra Pradesh in July 2014. We acquired the company as a fully owned subsidiary in June 2020.

In April 2017, S.A. Ajinomoto OmniChem N.V. succeeded with a commercial-scale production trial that involved adapting a traditional multi-step batch process into a continuous flow chemistry platform. Continuous flow manufacturing brought several advantages, including overall processing time reduction, increased reaction selectivity, better product quality, temporary storage cost savings, and better control of the entire production process, making it a powerful tool for contract manufacturing.

Expanding business from *Corynex*[®] to biopharmaceutical contracting

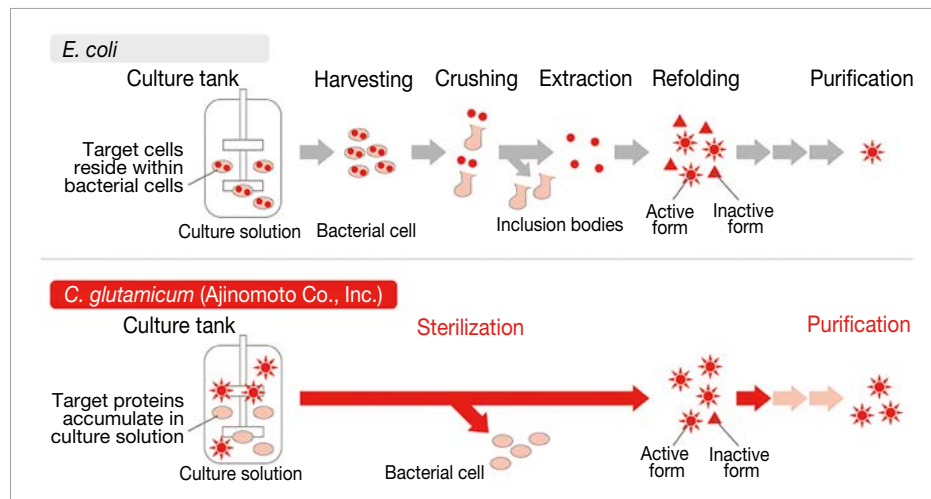
Since the 2000s, the pharmaceuticals market has seen new drug development come to encompass not only conventional small molecules but also biopharmaceuticals that are medium to large molecules. As with small molecules, large pharmaceutical companies have outsourced manufacturing operations, including development operations such as the cultivation and conjugation with small molecules, which are needed for biopharmaceuticals. The field of biopharmaceuticals, in which pharmaceuticals are made through the analysis of genes and the use of biotechnologies, is a prominent new field for us, and one in which we possess technologies related to amino acids, nucleic acids, and proteins. Here we have focused on business in pharmaceutical cell culture medium (see p.83) and contract manufacturing for biopharmaceuticals.

Our contract manufacturing business began in earnest in 2009 with the launch of a service involving the use of the *Corynebacterium Expression System*, or *Corynex*[®] (see “History” p.47), a new protein and peptide secretory expression system using *Corynebacterium* bacterial strain that produce glutamic acid. This protein contract manufacturing service allows for significantly reducing production costs over conventional manufacturing methods by simplifying the purification process.

¹ Refers to compounds generated in the process of producing active pharmaceutical ingredients from raw materials. With some medicines, making an active pharmaceutical ingredient requires passing through more than 10 intermediates.

Then in April 2013, we acquired U.S.-based contract development and manufacturing company for biopharmaceuticals Althea Technologies, Inc., which became Ajinomoto Althea, Inc. (see “History” p.44). With this acquisition, we inherited the former company’s development and manufacturing functions, which were adapted to cGMP (current GMP (see “History” p.44 footnote; p.83 for GMP)), as well as its connections with customers, bolstering its business in the U.S.

Figure II-3: Comparison with existing *Corynex*® production method



Pharmaceutical intermediates business — Acquisition of GeneDesign, Inc.

In December 2016, Ajinomoto Co., Inc. and S.A. Ajinomoto OmniChem N.V. acquired GeneDesign, Inc. (headquartered in Ibaraki-shi, Osaka), a contract development & manufacturing organization (CDMO) for nucleic acid drugs.

Oligonucleotide drugs have a base structure of nucleotides chemically modified from DNA or RNA to stable structures. They are also being developed for diseases previously difficult to treat, and have strong potential for market growth in Japan and overseas. Applying synthesis technologies developed over the years, we developed oligonucleotides based on liquid-phase synthesis (better suited to large-scale production than solid phase synthesis, the common synthesis method for oligonucleotides) and marketed the *AJIPHASE*® technology via CDMO business.

GeneDesign, Inc., founded in 2000, had received high acclaim from Japanese pharmaceutical companies and research institutes for being one of Japan’s leading CDMOs for oligonucleotides, and for possessing sophisticated technologies related to solid-phase synthesis as well as rigorous quality control expertise.

This acquisition saw us bring *AJIPHASE*®-related technologies and S.A. Ajinomoto OmniChem N.V.’s pharmaceutical manufacturing functions and expertise together with GeneDesign, Inc.’s first-class solid-phase synthesis process, highly-experienced personnel, and manufacturing functions compliant with cGMP. It paved the way to oligonucleotide CDMO business spanning from early-stage product development (high-mix, low-volume production using solid phase synthesis) to late-stage development and post-launch operations (high-volume production via liquid phase synthesis).



Distant view of GeneDesign, Inc.

The birth of “Ajinomoto Bio-Pharma Services”

In October 2018, S.A. Ajinomoto OmniChem N.V. and Ajinomoto Althea, Inc. announced that they would integrate their business operations to form “Ajinomoto Bio-Pharma Services.” The integration of S.A. Ajinomoto OmniChem N.V., which excels in small molecules, and Ajinomoto Althea, Inc., which have been involved in large molecules production and aseptic filling and packing services, realized a system for providing a wide range of services, and “Ajinomoto Bio-Pharma Services” sought to develop stronger relations of trust with customers by satisfying their needs.

Figure II-4: Overview of “Ajinomoto Bio-Pharma Services”



Through an integrated management system that includes GeneDesign, Inc. in Japan and Ajinomoto Bio-Pharma Services India Private Limited, “Ajinomoto Bio-Pharma Services” provides a wide range of cutting-edge platforms and functions ranging from pre-clinical and pilot programs to commercial mass production that include *Corynex*[®] protein expression technologies, oligonucleotide synthesis, antibody-drug conjugates (ADC)², high potency active pharmaceutical ingredients (HPAPI)³, biocatalysts, and continuous flow manufacturing.



Ajinomoto Bio-Pharma Services

2. Abbreviation for Antibody-Drug Conjugates. Conjugated antibodies that target cancer cells with a potent anticancer agent, ADC are anticancer drugs that attack cancer cells with a minimal impact on healthy cells.

3. Abbreviation for High Potency Active Pharmaceutical Ingredients. As substances with extremely powerful pharmacological effects, HPAPI must be carefully controlled to prevent leaks or contamination, and strict care must be taken when handling them, including containment and washing.

6

The Functional Supplemental Food Business

A focus on supplements and skincare

The Ajinomoto Group's in-house mail-order sales began with mail-order sales company Ajitsu Corporation¹ (liquidated in 2003), established in 1986, but full-scale mail-order business began through sales (exclusively via mail order) of *JINO*® cosmetics series, which launched in February 1997. Conducted primarily through catalogs and advertisements in newspapers and magazines, mail-order sales became even more commonplace with the spread of the Internet and popularization of TV shopping beginning in the 2000s.

Our BtoC health foods in Japan were handled by the Direct Marketing Group, which was part of the Health Service Development Department established in 2002. *Glyna*® was launched in August 2005 and *Capsiate Natura*® in September 2006.

The history of the Direct Marketing Group is given below.

The Direct Marketing Group was incorporated into the Wellness Business Division, established in April 2009, and became the Direct Marketing Department. Although the department then became the Direct Marketing Group of the Wellness Business Department when it was incorporated into the AminoScience Division in April 2015, it once again became the Direct Marketing Department in April 2016. In April 2017, the Direct Marketing Department took over the *JINO*® business, which was previously under the purview of the Specialty Chemicals Department.

The Direct Marketing Department deals in four categories of products, namely supplements, nutrition care foods, selected products, and skincare product *JINO*®, through the sales company Ajinomoto Direct Co., Inc. (established as A-Direct Co., Inc. in July 2005 and renamed in April 2019). By providing these products, along with information, tailored to consumers' needs, the department boosted sales and began turning a profit in FY2011.

Fundamental foods for greater variety

Fundamental foods, supplements handled by the Direct Marketing Department, are a group of products developed by Ajinomoto Co., Inc. With these products, we aim to "achieve foods that enhance 'the ability to live healthfully' that all people innately have and contribute to vibrant everyday life as a company that has been involved with food and health for over 100 years." Fundamental foods are characterized by two features: A) new health ingredients (new functions from amino acids and plants), and B) scientific evidence (concerning safety, usefulness, and mechanisms).

The product lineup consists of *Glyna*® (August 2005), a rest support supplement containing the amino acid glycine; *Capsiate Natura*® (September 2006), which contains a proprietary capsinoid extracted from a non-spicy variety of red pepper; "*Teiko Katsuryoku*®" *Cystine and Theanine* (December 2007), which enhances resistance in the body with a patented blend of the amino acids cystine and theanine; *Glucosamine & Chondroitin* (December 2007) with a blend of three ingredients² that support light movement, and *DHA & EPA*, (launched in October 2008), a source of omega-3 fatty acids³ important for staying healthy.



Glyna®

1. Products sold included foods introduced on the Japanese TV show "Gochisousama," solely sponsored by Ajinomoto Co., Inc.



Zeitaku Yasa®



Capsiate Natura®

2. Glucosamine, chondroitin, and hydroxytyrosol.
3. Docosahexaenoic acid (DHA), eicosapentaenoic acid (EPA), and alpha-linolenic acid. The acids in this product are derived from blueback (DHA/EPA) and flaxseed (alpha-linolenic acid).

The products below were added in 2009 and beyond.

- January 2011: *Puru Puru Amino and Collagen*
Supports firm, moist skin with two main ingredients:
Puru Puru Amino Acids®, a proprietary blend of four amino acids (valine, leucine, isoleucine, and glutamine), and ultra small-molecular-weight collagen, which has excellent absorption due to its nano size
- November 2013: *Amino Aile*®
Contains vitamin D and *Amino L40*, a leucine-enriched essential amino acid mixture, and supports flexibility and strength in active seniors
- April 2014: *Kashikoi Oyatsu*® *DHA*
Containing DHA made from algae produced in sanitary cultivation tanks, this product is a gummy-style supplement for children that is eaten like a snack
- January 2017: *Mai Asa Histidine*®
The essential amino acid histidine was discovered to be useful for fatigue care during in-house bonito stock research. This supplement utilizes these research findings to be useful for fatigue care and bright intelligence

As Food with Functional Claims⁴ (FFC) system began in August 2015, starting with *Glyna*® in August 2015, this product lineup is being expanded with scientifically-proven products, namely *Amino Aile*®, *Capsi*® EX, and *Mai Asa Histidine*®.

In March 2017, we invested \$15 million (about 1.7 billion yen) in Hinoman Ltd., an Israel-based venture capital firm, acquiring exclusive sales rights in Japan for the company's plant material *Mankai* (roughly 45% of the nutrients in the dried powder are protein). We are currently working with the company to commercialize the product.

4. Food products that are registered by Japan's Consumer Affairs Agency as those whose packaging makes functional claims based on scientific evidence under the food business operator's own responsibility.



Teiko Katsuryoku® Cystine and Theanine



Puru Puru Amino and Collagen



Amino Aile®



Kashikoi Oyatsu® DHA



Mai Asa Histidine®



Capsi® EX

7

The Sports Nutrition Food Business

(1) Chronicle of the sports nutrition business

Providing ongoing athlete support as JOC official sponsor

The Ajinomoto Group's sports nutrition business began in 1992 with nutrition science research centered on amino acids. The business came into its stride with the launch of *amino VITAL® PRO*, a blend of 12 amino acids, vitamins, and minerals, in March 1995. Sales later soared when the amino acids market entered a boom period in 2001. The business has been involved in the following Olympics-related activities.

- February 2003: Became an official partner of the Japanese Olympic Committee (JOC)
- June 2003: Launched the *VICTORY PROJECT®*, a program aimed at supporting athlete development, with the JOC
- 2004: Provided nutrition support to the Japanese national team at the 2004 Athens Olympic Games. Launched similar support programs in South Korea, the U.S., and other countries
- June 2005: Chosen as an official partner for sports supplements by the American Olympic Association



amino VITAL® PRO

These events led to a basic agreement with the JOC in May 2009 in which we acquired naming rights for the National Training Center (Nishigaoka, Kita-ku, Tokyo; opened in 2008) for four years¹. The facility was thereafter renamed to the *Ajinomoto National Training Center*². It was also decided that we would provide athletes with nutrition support in the nutrition management cafeteria at the Center, nutrition advice from our contracted nutritionist, and guidance on how to use amino acid supplements. At the signing of this contract, we also updated the partnership agreement with the JOC, moving up to the JOC Gold Partner program rank, the highest for official partners in Japan.

In July 2009, the Amino Acid Consumer Products Department, which was in charge of the sports nutrition business, came under the purview of the Wellness Business Division. After becoming the Sports Nutrition Department in April 2010, it began providing a wide range of support for athletes. In September 2010, we signed an official sponsorship agreement with Japan Swimming Federation. After the *VICTORY PROJECT®* was launched, we continued providing nutrition-related support to the Japanese national swimming team and sponsoring for the Japan Inter College Swimming Championships, building trust-based relationships. At the 2012 London Olympic Games, we developed *amino VITAL® GOLD London Special*³, an amino acid supplement, and distributed it free of charge. We also signed an additional partnership agreement with the JOC to add frozen foods to the contract category, further strengthening our ties with athletes. In May 2012, we acquired the naming rights for Nishigaoka Soccer Field (built in 1972; located next to the *Ajinomoto National Training Center*), the only national soccer-exclusive stadium in Japan, and named it *Ajinomoto Field Nishigaoka*.

Through these continued efforts, in March 2016 we became an official partner of the 2020 Tokyo Olympic and Paralympic Games (providing cooking condiments, dehydrated soups, amino acid-based granules, and prepared frozen foods), adding coffee (coffee beans and instant coffee powder/granules) to the agreement in November 2018. As at the 2012 London Olympic and Paralympic Games, the 2016 Rio de Janeiro Olympic and Paralympic Games saw us provide

1. Naming rights allow a sponsor company to pay to have its name and brand names put on sports facilities and other buildings. It is a key means of raising money to build or operate professional sports facilities.
2. Ajinomoto Co., Inc. signed a naming rights agreement with Tokyo Stadium Co., Ltd. in November 2002, the first naming rights agreement signed with a public facility in Japan. This gave rise to the *AJINOMOTO STADIUM* in March 2003.



amino VITAL® GOLD London Special

3. Developed through joint research with the Sports R&D Core of the University of Tsukuba, which was given the Team Japan Multi-Support Project, an R&D project from the Ministry of Education, Culture, Sports, Science and Technology.

the Japanese national team with a total of 300,000 amino acid-based granule products, including *amino VITAL® Rio 2016 Japanese national team Special*. We provided similar support for the 2018 PyeongChang Olympic Winter Games.

In addition to supporting the activities of the Japanese national team, we fashioned the concept of *Kachimeshi®*, a creation born from support provided to athletes at the SAKURA Dining cafeteria in the *Ajinomoto National Training Center*. We also published a book entitled *The Japanese Olympian's Diet Program: "Kachimeshi®" Recipes for Strong Youth* (July 2013), launched the *Kachimeshi®* Journal website, making the recipes more widely known (see "History" p.67-70 for more information about activities involving the Olympic and Paralympic Games, and *Kachimeshi®*).

Starting in 2010, we began entering into group portrait rights agreement with several sports associations, granting us the right to use athletes' photographs. Particular support was given to swimmers, badminton players, and figure skaters such as Mr. Yuzuru Hanyu, greatly contributing to enhancing our corporate image.

In November 2015, We launched three *amino VITAL®* products in Taiwan, followed by the launch of *amino VITAL® GOLD* (via online order) in Brazil in September 2016.

(2) Sports nutrition product development

"amino VITAL®" brand business

A pillar of the sports nutrition business, amino acid-based nutrition food *amino VITAL®* was launched in a variety of forms beginning in 1995, including as granules, bottled drinks, jelly drinks, and tablets. With the release of powder type, which is prepared by mixing with water, the *amino VITAL®* series was available in almost every form.

New *amino VITAL®* products containing additional benefits were later released.

amino VITAL® Capsi®, released in April 2010, is an amino acid supplement containing capsinoids (see p.87) for supporting burning during exercise.

In 2012, a series of products released in new fields.

In February, we launched *amino VITAL® Perfect Energy*, a jelly-based energy food supplement containing a proprietary blend of amino acids and carbohydrates. The intake of amino acids and carbohydrates enables the body to better utilize kinetic energy and supports performance towards the end of exercising.

In March, we launched *amino VITAL® Amino Protein*, a hybrid product containing essential amino acids and whey protein, at sporting goods stores throughout Japan. While Japan's sports protein market was growing steadily, users had many dissatisfactions with existing products, including that they were not very portable, tasted bad, or were difficult to mix into drinks. This product solved these dissatisfactions: one serving was only 4.4g (one stick, generally containing about 20g of protein per serving), and users could drink the product as is without first mixing in a shaker (lemon, chocolate, and blackcurrant flavors were released in February 2013, October 2014, and February 2018, respectively, in response to target consumers' preferences).

In August, we made a nationwide launch of *amino VITAL® GOLD* (see p.89), an amino acid supplement developed for the Japanese national team at the 2012 London Olympic Games. Containing 4,000mg of essential amino acids, with a high volume of leucine, in particular, the product provided athletes with speedier post-exercise recovering (a jelly drink version was additionally released in August 2015).

With the release of the following products, the *amino VITAL®* series became a product supporting a variety of consumers, as well as athletes. Jelly drinks, in particular, enlarged the market as demand grew for convenience foods, increasing the size of the business significantly.

February 2010: *amino VITAL® Jelly Drink Guts Gear®* Muscat. This contains 130mg of calcium and 1,500mg of amino acids, providing 200 calories (the amount of energy in more than two bananas, yogurt and apple flavors were added in February 2012 and February 2015 respectively)



amino VITAL® Rio 2016 Japanese national team Special



amino VITAL® Capsi®



amino VITAL® Perfect Energy

- August 2017: *amino VITAL® Amino Shot®*
This low-volume jelly drink contains a high concentration of amino acids produced via proprietary technology, and can be consumed in the midst of endurance sports such as running
- August 2019: A full-scale overhaul of the *amino VITAL® PRO* and *amino VITAL®* products, the first overhaul since their launch



amino VITAL® Amino Protein
Vanilla

4. Leucine-enriched Essential Amino Acids mixture

Drawing on research conducted for the Japanese national team at the 2012 London Olympic Games and 2016 Rio de Janeiro Olympic and Paralympic Games, *amino VITAL® PRO* contains a proprietary mix of essential amino acid (LEAA⁴, patented), and both products were designed to support full-body conditioning with a blend of cystine and glutamine. These products also feature improved palatability thanks to technologies for reducing the bitterness of amino acids and to granule production technologies that enable the contents to quickly melt in the mouth. This prompted us to better communicate that *amino VITAL®* (popular version containing 2,200mg of amino acids), renamed to *amino VITAL® Active Fine*, is a product for sports lovers.



amino VITAL® GOLD



amino VITAL®
Jelly Drink Guts Gear®



amino VITAL®
Amino Shot®



amino VITAL® PRO



amino VITAL® Active Fine

Launch of *No-Mikata®* hangover care

Following on the launch of *Kanpai Iki-iki* in 2003 and *amino de Kan pai®* in 2006, *No-Mikata®*, a supplement released in August 2009 containing amino acids, is a somewhat unconventional product in the sports nutrition field that quickly replenishes the amino acid alanine to care the negative effects of alcohol consumption.

Alanine is an amino acid found in abundance in shellfish, particularly freshwater clams. Freshwater clams have long been said to have salutary effects, and numerous health foods touting their freshwater clam ingredients were released around this time. Each stick of *No-Mikata®* has the alanine content of 160 freshwater clams, and since amino acids need not be broken down to be digested, the alanine is absorbed in around 30 minutes. *No-Mikata®* also contains glutamine, to protect the body from the inside. Taking the form of granules that rapidly melt in the mouth, *No-Mikata®* is a fast-acting product of care for hangover able to be taken without water.

At product release, we launched a website for mobile phones that provided product information through links to game and foodie websites. We also worked to familiarize the target demographic (men and women in their 20s and 30s) with the product, including distributing product samples to 100,000 people and holding events downtown.



No-Mikata®

8

The AminoIndex Business

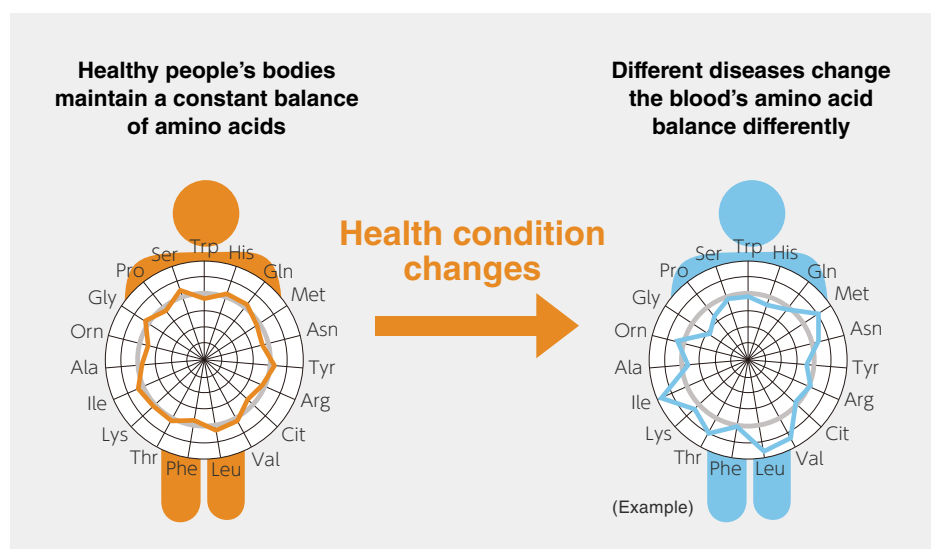
Assessing health and disease risk based on balance of amino acid concentrations

In April 2011, the Ajinomoto Group launched the *AminoIndex® Cancer Screening (AICS®)* service for assessing existing cancer risk and analyzing the balance of amino acid concentrations in the blood.

The service is powered by two technological developments: high-speed amino acid analysis beginning in the early 2000s, and multivariate analysis, which analyzes the concentrations of 20 types of amino acids in the blood (multiple independent data are analyzed together). Although it was previously known that the balance of amino acid concentrations in the blood changes in different ways with different diseases¹, analyzing amino acid balance was only done in cases such as congenital metabolism disorders and liver disease due to large individual differences among patients and the difficulty of reproducing amino acid analysis results.

1. Proteins make up about 20% of the human body, and amino acids compose these proteins. There are 20 types of amino acids in the blood, and a constant balance of amino acids is maintained in the blood of healthy people. When a person contracts a disease, however, one's metabolic balance changes along with amino acid concentrations in the blood.

Figure II-5: Changes in concentration balance of amino acids in the blood



However, in 2002, we developed a technology that reduced the time needed to analyze one sample from roughly two hours to about seven minutes by derivatizing amino acids before they are separated² and using Liquid Chromatograph/Mass Spectrometry (LC-MS). The Health Informatics (HI) Han was formed thereafter, in July 2006. In around 2008, the target for this service was focused on cancer, and with support from healthcare facilities and physical exam providers, we collected and stored a vast amount of clinical data for building evidence to use as a platform for multivariate analysis. Although we struggled to find more research collaborators, persistent efforts to accumulate data and explain the importance of the tests won us broader cooperation from many medical facilities. Ultimately, we were able to show that the amino acid concentration balance in the blood of cancer patients differs from that found in healthy people, depending on the type of cancer they have.

2. A pre-analytical preparation to simplify LC-MS analysis by reacting a compound (in this case, amino acids) with derivatization reagents to improve volatility and heat stability.

In July 2009, the HI Han was incorporated into the newly-established Wellness Business Division, and was thereafter promoted to the AminoIndex Department in April 2011 with the start

of the *AICS*[®] service. The department's operations were then transferred to the AminoScience Division in April 2015, and the AminoIndex Department was formed within the AminoScience Division when the target conditions for the *AminoIndex*[®] service were expanded to cover brain stroke and myocardial in April 2019.

Launching of *AminoIndex*[®] Cancer Screening (*AICS*[®])

AminoIndex[®] Cancer Screening, launched by Ajinomoto Co., Inc. in April 2011, was the world's first service to measure and analyze amino acid balance in the blood for assessing existing cancer risk. The service analyzes blood samples (about 5ml) and expresses cancer risk as a number between 0.0 and 10.0 (the AIC indicator), with a higher number indicating a higher cancer risk, and as either rank A, B, or C to facilitate early detection and treatment.

In launching the service, we signed a joint venture agreement with clinical testing company SRL, Inc. in November 2010. The two companies played different roles, with SRL, Inc. collecting blood samples, analyzing amino acids, conducting sales operations, and sharing test results, and Ajinomoto Co., Inc. examining analysis data, providing academic support, and developing products. The companies then tried to apply it to physical examinations and other tests. The service covered five cancers that develop in the bodily organs: gastric, lung, colorectal, prostate, and breast cancers.

Six months later, in October 2011, the results of a large clinical study that had been conducted with the Department of Gynecology and Obstetrics of Yokohama City University proved the usefulness of the index based on AminoIndex technology in assessing the risk for three types of cancer exclusive to women – cervical, endometrial, and ovarian cancer – leading to the adding of this test to the service in May 2012.

In the meantime, in December 2011, the “AminoIndex Technology” was designated as an effort of the field of “personalized and preventive medical treatment” in the Keihin Waterfront Life Innovation International Strategy Specialized Zone in the cities of Yokohama-shi and Kawasaki-shi in Kanagawa, by the Cabinet Office of Japan. These zones are aimed at strengthening the international competitiveness of Japanese industry, and the Keihin Zone is aimed at achieving personalized and preventive medical treatment needed by the next generation of healthcare professionals to solve healthcare problems faced in Japan, a super-aged society.

Through joint research with Nara Medical University, in December 2013 we demonstrated the mechanism whereby changes in amino acid balance in the blood, the key to *AICS*[®], lead to proteins in normal cells being broken down into amino acids and some of them being leaked into the blood due to the function of a protein known as HMGB1, which is secreted from cancer cells. This research therefore also served to elucidate the physiological effectiveness of *AICS*[®].

AICS[®] was expanded to cover pancreatic cancer in August 2015, and as of the end of 2019, close to 1,500 healthcare providers were using the service.

Towards *AIRS*[®], now capable of assessing future lifestyle disease risk

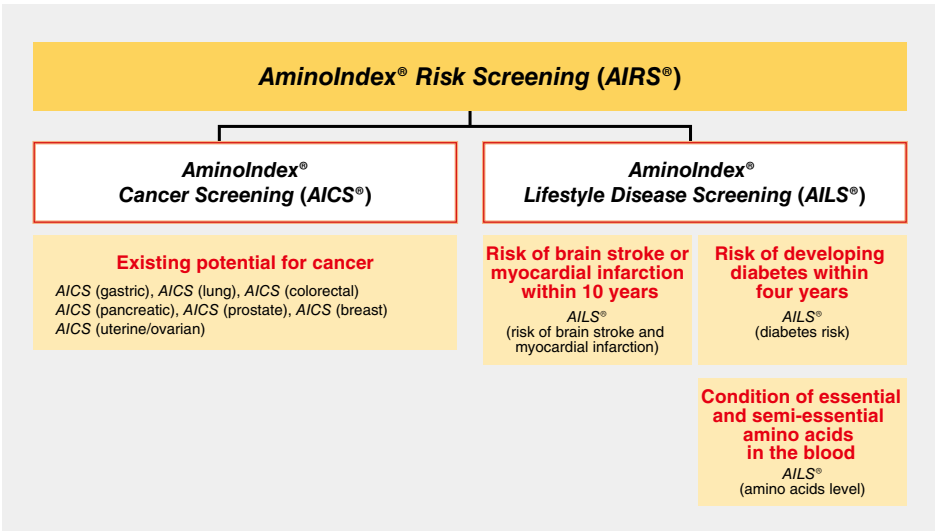
Concurrent with efforts to commercialize *AminoIndex*[®] Cancer Screening (*AICS*[®]), we began to use its *AminoIndex*[®] Technology for other diseases.

One step in this process was the forming of a partnership with Kao Corporation in May 2012. With a focus on middle-aged and elderly individuals with metabolic syndrome, Kao Corporation embarked on research as well as the development and sale of healthcare products. It also began conducting QUPiO, a program to prevent metabolic syndrome. The program is provided by the group company Healthcare Committee, Inc. for health insurance societies and similar organizations. We acquired a share in Healthcare Committee, Inc. and created a health portal service that combines the health checkup-related expertise offered by QUPiO and our information about proper diets and metabolic syndrome screening information based on amino acid analysis using “AminoIndex Technology.” Through this partnership, we built up knowledge of lifestyle disease prevention and acquired valuable experience through an alliance strategy.

In April 2014, we began joint research with Massachusetts General Hospital (Boston) using data from the Framingham Heart Study³, an epidemiological study commissioned by the U.S. Congress. Through research involving individuals who had received physical examinations, we discovered a link between fluctuations of the balance of amino acid concentration in the blood

3. A follow-up epidemiological study of ischemic heart disease started in Framingham (outside of Boston, the U.S.) with a cohort of 5,000 people. The study found correlations between lifestyle diseases such as ischemic heart disease and cholesterol, high blood pressure, smoking, obesity, and diabetes.

Figure II-6: *AminoIndex*[®] Risk Screening (*AIRS*[®]) features



and visceral fat deposits. Meanwhile, a research group with Massachusetts General Hospital released a paper explaining how the risk of diabetes or cardiovascular disease could be predicted about 10 years in advance by analyzing the strong correlation between the balance of amino acid concentration in the blood and the risk of such diseases occurring. This joint research aimed to establish a universal risk prediction model that could be applied worldwide, transcending such differences as country or race.

Following these developments, in November 2017 we expanded *AICS*[®] with the launch of the *AminoIndex*[®] Risk Screening (*AIRS*[®]) service as an additional service to *AminoIndex*[®] Lifestyle Disease Screening (*AILS*[®]). *AILS*[®] (risk of diabetes) assesses the risk of developing diabetes within four years based on a person's balance of amino acid concentration in the blood. *AILS*[®] (amino acids level) assesses such things as low amino acid levels based on the concentration in the blood of 10 essential and semi-essential amino acids that people must get from their diet. The results of these two assessments are categorized into four types, and examinees are provided with "*AILS*[®] Lifestyle Improvement Guide" booklets according to their type. These assessments therefore help prevent disease. In April 2017, we formed a joint venture agreement with BML, Inc., a clinical testing company, and built a two-company sales structure consisting of SRL, Inc. and BML, Inc. Then in April 2019, *AILS*[®] was expanded with an assessment to determine a person's risk of having a brain stroke or myocardial infarction within 10 years. The top three diseases resulting in death among Japanese are cancers, brain strokes and myocardial infarction. There are also 20 million Japanese with diabetes, including those at risk, and diabetes can also cause numerous complications. As we seek to help extend the healthy life expectancy of people and support comfortable lifestyles, we will continue working to provide services to support the early detection and prevention of various diseases.

9

The Pharmaceuticals Business

The pharmaceuticals business restructuring

Establishment of AJINOMOTO PHARMACEUTICALS CO., LTD.

With its origins in the sale of amino acids for pharmaceutical use, the Ajinomoto Group's pharmaceutical business started in the 1970s. We launched products based on amino acid and its derivative research, including *MEDIF*[®] (1974), a diet for protein-energy malnutrition; *ELENTAL*[®] (1981), the world's first elemental diet; *LENTINAN*[®] (1986), an anti-cancer drug; *AJICEF*[®] (1987), an antibiotic agent; *LIVACT*[®] (1996), an amino acid formula for liver cirrhosis; and *FASTIC*[®] (1999), an anti-hyperglycemic agent.

During this time, the Pharmaceuticals Department was formed in 1985, becoming the Pharmaceuticals Division in July 1999, focusing on clinical nutrition and infusion solutions. We acquired Hoechst Marion Roussel Ltd.¹'s infusion business in December 1999 and established Ajinomoto Pharma Co., Ltd. After becoming a pharmaceutical company in April 2002, we expanded in size with the acquisition of Shimizu Pharmaceutical Co., Ltd. in December of that year. From April 2005, Ajinomoto Co., Inc. was responsible for business strategy, reliability assurance, and R&D functions, Ajinomoto Medica Co., Ltd. (renamed after Ajinomoto Pharma Co., Ltd.'s production and logistic functions to Shimizu Pharmaceutical Co., Ltd.) for production and logistics functions, and Ajinomoto Pharma Co., Ltd. for sales and marketing functions.

The 2000s saw a series of mergers following massive investment into new drug development by pharmaceutical companies, making it an age of fierce competition among large pharma companies². In April 2010, the Pharmaceutical Company of Ajinomoto Co., Inc., Ajinomoto Medica Co., Ltd., and Ajinomoto Pharma Co., Ltd. concluded a merger, forming AJINOMOTO PHARMACEUTICALS CO., LTD. and establishing an integrated production, development, and sales structure.

Establishment of EA Pharma Co., Ltd. with outside collaboration

AJINOMOTO PHARMACEUTICALS CO., LTD. recorded 85.8 billion yen in revenues for FY2008, falling short of 100 billion yen. At this level, AJINOMOTO PHARMACEUTICALS CO., LTD. lacked the wherewithal to survive in the pharmaceuticals industry in Japan, let alone the global industry. Seeking a way out through collaboration with external organizations, we established AY PHARMACEUTICALS CO., LTD. as a joint venture with Yoshindo Inc. in July 2013 (equity share: Yoshindo Inc. 51%/Ajinomoto Co., Inc. 49%), and transferred its infusion solutions and dialysis business to the new company via divestiture. We dissolved the joint venture in 2016, and Yoshindo Inc. acquired AY PHARMACEUTICALS CO., LTD as a fully owned subsidiary.

Meanwhile, with regard to AJINOMOTO PHARMACEUTICALS CO., LTD., we formed a strategic partnership with Eisai Co., Ltd. in October 2015, which led to the decision to move the latter's gastrointestinal disease business to AJINOMOTO PHARMACEUTICALS CO., LTD. April 2016 saw the establishment of EA Pharma Co., Ltd. (equity share: Eisai Co., Ltd. 60%/Ajinomoto Co., Inc. 40%) as a specialty pharma focused on the gastrointestinal tract. EA Pharma Co., Ltd. now aims to satisfy the needs of patients and their families as a human healthcare company specializing in the gastrointestinal tract, utilizing an extensive range of knowledge derived from experience and data unique to the two groups.

1. With investment from Ajinomoto Co., Inc., contract pharmaceutical sales company Morishita Pharmaceutical Co., Ltd. merged with France-based Roussel Medica Co., Ltd. to form Morishita Roussel Co., Ltd. The company then merged with Germany-based Hoechst AG in April 1998 to become Hoechst Marion Roussel Ltd.

2. These include the U.S.-based Pfizer, Inc. and Merck & Co., Inc., Switzerland-based Novartis International AG and F. Hoffmann-La Roche AG, France-based Sanofi S.A., and UK-based GlaxoSmithKline PLC, each recording sales of 4-6 trillion yen in FY2017. Takeda Pharmaceutical Company Limited, Japan's largest pharmaceuticals company, had sales of 1.7 trillion yen. It became the eighth largest in the world with its 2018 acquisition of Ireland-based Shire PLC.

These efforts constituted a restructuring of our pharmaceutical-adjacent business, and we went on to expand business in cell culture media for regenerative medicine (see p.83), Contract Development and Manufacturing Organization (CDMO, see p.84-86) and *AminoIndex*[®] (see p.93-95), specializing in and focusing on areas in which we could exercise a strength: state-of-the-art amino acid research and a wealth of bioscience and chemical synthesis technologies.

III

Corporate Division

1

Rebuilding of Organization

Change to a business headquarters system

In April 2010, the Ajinomoto Group discontinued its virtual company system (implemented in FY2002) and migrated to a business headquarters system. We addressed the adverse effects of the prior vertically-integrated system and strengthened cooperation among departments as part of "FIT" (structural reform), utilizing amino acid research achievements and other assets in a variety of ways. Specifically, our pharmaceuticals business was split off (see p.96), and the foods and amino acids companies were returned to the business headquarters system. With the goal of achieving organization-wide optimization and improved management efficiency, the resulting business headquarters system consisted of four divisions: the Food Products Division, the Bioscience Products & Fine Chemicals Division, the Wellness Business Division (in business since July 2009), and the existing China Business Strategy & Planning Division.

Accordingly, for the corporate departments, a plan was issued to formulate and support strategies regarding a shared Group-wide platform (the Group corporate), which served not only as Ajinomoto Co., Inc.'s platform, but also consolidated all functions common to Group companies (finance and accounting, HR, procurement, logistics, IT, etc.). It aimed not only to improve efficiency by consolidating practical business affairs common Group-wide, but also to generate new ideas through efforts made among the Group in areas such as human resources and IT. To this end, corporate divisions were migrated to the Corporate Departments and plants in Japan were reorganized into the Production Departments.

Inauguration of the Business Strategy and Development Department

The Business Strategy and Development Department, formed in July 2013, promotes open innovation, forges alliances, and conducts M&A as specific measures aimed at achieving the utilization of external resources set forth in the FY2011-2013 Medium-Term Management Plan. The organization is in charge of conducting due diligence (making preliminary assessments) with respect to M&A and business alliance projects in Japan and overseas, as well as submitting proposals to the Executive Committee Meeting, with a project team comprising members from related business departments and corporate sectors (corporate planning, finance, legal affairs, etc.).

In addition, as well as handling such things as designing business portfolios prior to M&A and alliances, and initial procedures and reviews for Post Merger Integrations (PMI), the department serves as a place for cultivating talent through experiencing the M&A process of evaluating, acquiring, and integrating targeted companies.

Establishment of the Global Corporate Division

In April 2017, the Corporate Departments were split into two divisions: the Global Corporate Division and the Japan Corporate Division. Through the FY2011-2013 and FY2014-2016 Medium-Term Management Plans, we had been placed a greater emphasis on achieving a quicker and more profound expansion of our operations worldwide, including M&A. In line with this, we embodied the direction of corporate division reforms in the areas of Group-wide planning and business support. In April 2018, the roles of the Global Corporate Division and the Corporate Service Division were as follows.

Global Corporate Division

- Drafting and formulation of global strategies and plans via integrated planning and

supervising functions

- Planning and creating taskforces to address management issues that span multiple functions

Corporate Service Division

- Providing specialized services and operations to businesses, regions, and planning functions through consolidated support functions

Currently, by collaborating and improving integration efficiency with outside organizations, efforts are being made to reduce the ratio of common expenses to sales with regard to the individual functions of the Corporate Service Division.

Establishment of Ajinomoto Digital Business Partners Co., Inc.

In April 2020, Ajinomoto Co., Inc. established Ajinomoto Digital Business Partners Co., Inc. through a joint venture with general consulting firm Accenture Japan Ltd. (equity share: Ajinomoto Co., Inc. 67%/Accenture Japan Ltd. 33%). Ajinomoto Digital Business Partners Co., Inc. is headquartered in Hatchobori, Chuo-ku, Tokyo, and employs about 300. The establishment of this company was intended as a means to reinforce our management foundations and reform our corporate departments through collaboration with outside organizations.

The main task of Ajinomoto Digital Business Partners Co., Inc. is to consolidate and manage the operations of Ajinomoto Co., Inc.'s corporate organizations (HR, general affairs, public relations, procurement, etc.). For corporate departments as well as business operations, Ajinomoto Digital Business Partners Co., Inc. seeks to improve operational quality and efficiency while establishing a structure for continuously cultivating talent at a high level.

2

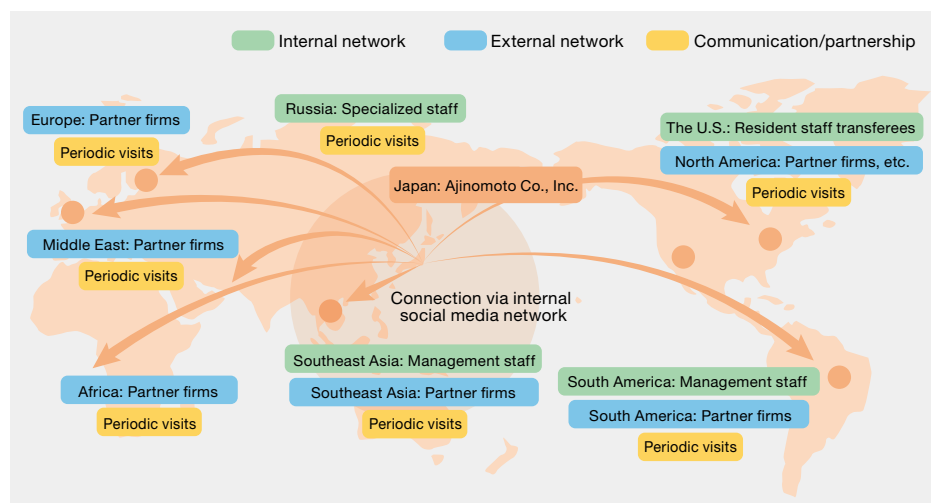
The Initiatives in Each Corporate Function

Intellectual property strategies – contributing to business activities in such areas as intellectual property management and joint R&D contracts

Along with managing the Ajinomoto Group's intellectual property, the Intellectual Property Department acquires and maintains our patents and trademarks. The department works with the R&D and business departments to create intellectual property portfolios directly tied to business profits. Through activities that include drafting, reviewing, and negotiating contracts concerning joint research and development with startups, universities, and companies in other industries, the department supports open & linked innovation and facilitates the acquisition of the technologies and intellectual property that will enable future business and the building of good contractual relationships both inside and outside of the Group.

Organizationally, restructuring efforts were made in FY2016, expanding strategic functions. We outsourced information search and intellectual rights management operations to affiliated company Intellectual Property Expert Co., Ltd. to boost efficiency. We have specialized staff posted in Virginia, the U.S. and Moscow, Russia, and we have also appointed key persons to intellectual property-related posts at the Group companies in Southeast Asia and South America as part of efforts to create a structure for protecting and acquiring intellectual property at a global level.

Figure III-1: Intellectual property management system



As one effort to better utilize information, our intellectual property information system, which is accessible by Ajinomoto Co., Inc. employees and the major Group company employees, was significantly overhauled in January 2019. By ushering in paperless communication with patent offices and storing data in the system, the information flow was strengthened. This system contributes to better decision-making by R&D and business departments, and it will be integrated with these departments' information systems in the future to further increase information value. The Intellectual Property Department has also launched and is promoting the usage of the *AJIBUN2* system (April 2016), which allows the departments to view one another's Group company license contracts, and the "Trade Secret Protection Platform" system (September 2018)

to facilitate opportunities to exchange confidential information among the Group companies (consensus building concerning the protection of trade secrets).

Regarding patent acquisition, since FY2010 we have undertaken activities aimed at both contributing to business and carefully selecting countries for patent application. We currently hold close to 4,000 patents¹, and is ranked number one in Japan for the capability to prevent other food industry companies from obtaining patent rights (according to a 2019 Patent Result Co., Ltd. survey; see “History” p.33). We swiftly acquired patents for electronic materials, *AminoIndex*[®], cell culture media for regenerative medicine, and *AjiPro*[®]-L, contributing to a shift to specialty-based business.

We also hold approx. 5,000 trademarks, acquired as necessary to provide products and services. When deploying the Ajinomoto Group Global Brand Logo (AGB) in October 2017, we examined each business’s current status and future expansion plans, and applied for AGB-related trademarks in 147 countries. As of the end of 2019, we have registered trademarks in 135 countries, creating an infrastructure for activities to enhance our global brand value.

The Intellectual Property Department also provides robust support for matters related to contracts and intellectual-property registration in areas that include concluding M&A contracts and establishing companies that involve the acquisition or transfer of important intellectual properties (acquiring 100% equity in Ajinomoto General Foods, Inc., and establishing Ajinomoto Istanbul Food Industry and Trade Limited Company and Tsubame BHB Co., Ltd.), transfer of business (Hong Kong Amoy Food Ltd.), the licensing of important technologies (bio-heparin, etc.), and facilitating licensing operations within the Group.

While we have established a reliable information search structure to prevent us from infringing on the intellectual property rights of other companies, we have also taken resolute action against companies failing to respect our intellectual property, which includes the following lawsuits.

- 2009: Won a patent infringement lawsuit concerning transglutaminase against a Chinese product distributor in Germany
- 2013: Filed a patent infringement lawsuit for a lysine manufacturing process against Hong Kong-based GBT Group in the Netherlands (see p.75-76)
- 2016: Filed a patent infringement lawsuit for a tryptophan manufacturing process against South Korea-based CJ Group in the U.S. and Germany (see p.76)
Filed a patent infringement lawsuit for a monosodium glutamate manufacturing process against South Korea-based CJ Group in Japan and Germany

Implementing advertising strategies with a view to changing consumer behavior

Regarding advertising media since 2009, TV has remained the top medium in terms of interaction time, but mobile phones and smartphones are now the largest medium among people in their teens and 20s. Web advertising expenditures exceeded that of TV in 2019, and this kind of change has occurred during 2009-2019. Since the time of Saburosuke II and Saburosuke III, who popularized *AJI-NO-MOTO*[®], we have been conducting advertising tailored to the media consumers interact with². We have developed our corporate communication and brand communication styles in accordance with these changes.

Our corporate communication initiatives have focused on popularizing the “Eat Well, Live Well.” corporate message since the FY2014-2016 Medium-Term Management Plan, with advertising done through a media mix comprising paid media (TV, newspaper, Web, etc. mass advertising involving the payment of leverage), earned media (public communications, publicity activities, and others), shared media (advertising by consumers themselves, such as on blogs and social media), and owned media (the Ajinomoto Group websites and social media, etc.). Some of our newspaper advertisements have won awards, including the “Japanese foods are made of Japanese natural colors” (Dentsu Advertising Award for newspapers) and “*Gochisousama, Heisei*” (JAA³ Advertising Award for newspapers). During the period of the FY2017-2019 Medium-Term Management Plan, the Advertising Department collaborated with business departments to carry out communications plans based on such concepts as “food and health” and “sports and nutrition” in preparation for the 2020 Tokyo Olympic and Paralympic Games, and we worked

1. This number was 3,624 in 2009 and 3,726 in 2013, after which over 500 patents were transferred to EA Pharma Co., Ltd.

2. We have also demonstrated our connection to advertising through involvement with the “Zenkoren Suzuki Saburosuke Regional Campaign Award” (renamed to the “Zenkoren Suzuki Saburosuke Regional Creative Award” in 2016) since 2007. The program is conducted by the Japan Advertising Federation using donations originally from Saburosuke Suzuki IV, who served as the federation’s third director.

3. Japan Advertisers Association



Japanese foods are made of Japanese natural colors

to boost awareness of *Kachimeshi*® and AGB (see “History” p.81), which was announced and launched in October 2017.

In our brand communications, we leverage media according to consumers’ increasingly diverse habits, working to create content, strengthening the ability to respond in an increasingly digital world, and communicate comprehensively through TV and other existing media. A particular focus has been on following marketing strategies to improve planning, and reaching consumers by producing more advertising editorials while coordinating more closely with sales activities. We also expanded its demographic scope and began trying to reach age groups not previously focused on. Ads targeting seniors included commercials on broadcasting satellite TV channels for health-focused products, and advertising to children and teenagers (junior high schoolers to college students) included smartphone ads and Web videos about how to make dishes. The advertisements have used “sizzle words”⁴ that convey the “No. 1 in deliciousness” quality of our products, encouraging a purchase. We have also been working to increase our fanbase by incorporating social issues such as eating together, vegetable consumption, and convenience, and presenting them as products that solve these issues.



Gochisousama, Heisei

4. Words that call attention to the succulent and fresh nature of a product (accompanied by images of steam, moisture, cooking, or cross-sections of ingredients) to whet the appetite and encourage purchasing.

Taking corporate communications to the next level (1) — Taking activities global

In our corporate communication activities, we have focused on A) facilitating faster growth globally, B) efficiently and systematically disseminating corporate information, C) enhancing internal communications, D) promoting awareness of umami, and E) strengthening direct communication.

The following have been some of the issues concerning our communication activities on a global level:

- A relatively smaller corporate presence
- A lack of consistency in communication
- The social value provided in carrying out the Ajinomoto Group Creating Shared Value (ASV) – that is non-financial information – has not been effectively conveyed

The following issues exist regionally:

- | | |
|-----------------------------------|--|
| Japan: | Low awareness of the corporate message “Eat Well, Live Well.” |
| Southeast Asia and South America: | Low awareness of the corporate image and social value provided |
| The U.S. and Europe: | Either awareness of the corporate brand is low or the brand is not seen as safe and secure |

To address these issues, in 2011 we embarked on efforts to align all of our public communication activities and have convened the Ajinomoto Group Global PR Conferences (AGPC, once a year) organized by the Public Communications Department and attended by representatives from all major Group companies. At AGPC, we shared the Group’s public communications strategy and each Group company’s best practices, while also holding discussions concerning media networking and other topics. AGPC was renamed to the ASV & Brand Communication Conference (ABCC) in 2017, and discussions at these conferences have focused on ways to further improve corporate value.

During this time, in April 2016 the Global Communication (GC) Department was formed to promote a Group-wide integrated communication strategy to enhance corporate brand value. This department took over the relevant functions of the Public Communications Department, the Advertising Department, and the CSR Department.

The GC Department began issuing Integrated Report in 2016 that use a storytelling format to inform our stakeholders about our approach and activities to create value through ASV. Along with this, we had put together the following key communication materials: Integrated Reports are the primary communication materials, and the secondary communication materials complementing the Integrated Reports are the Sustainability Data Book, IR Data Book, Financial Statement, and Corporate Governance Report.

As an essential tool for public communication activities about amino acids and umami,

scientific data is made available on a portal site concerning such topics as the function and usefulness of amino acids, with the Group company personnel able to access the content freely. To raise our profile overseas, we issued newsletters in nine languages to media outlets in 11 countries, providing non-financial information. AGB (see “History” p.81), which was announced and launched in October 2017, serves as a symbol unifying corporate brand value. In 2018, the GC Department released our first global advertisement, entitled “Can I have more?”

Currently, the GC Department’s activities also include building a messaging system to promote corporate brand value (see “History” p.81), formulating a global communications plan, and facilitating the drafting of public communication’s strategies for the Group companies.

The Olympic & Paralympic Promotional Office was established in April 2017, and relevant operations were transferred to it from the GC Department.

Taking corporate communications to the next level (2)

— Disseminating corporate information effectively and systematically

We are making number of efforts to disseminate corporate information. President & CEO Masatoshi Ito, inaugurated in 2009, emphasized sharing information with shareholders and other stakeholders, and as ASV has become a foundation of our management (see “History” p.13-18), this has become more important than ever.

We continue striving towards more deliberate and effective public communications through efforts that include strengthening coordination with and among important spokespeople, groups, and types of media.

Refinements have also been made to how the effectiveness of these efforts is gauged. The Global Corporate Brand Integrated Survey (C-BIS), launched in FY2016, targets the consumers and Group employees in major countries where our retail products have a certain presence. In addition, in FY2017 we introduced the Impact Index Conversion Value (IICV) system for assessing media exposure effectiveness. We have been using the system to help ascertain and improve our activities.

Taking corporate communications to the next level (3)

— Communications within the Ajinomoto Group

Since his inauguration as President and CEO in 2009, current Chairman of the Board Masatoshi Ito has placed an emphasis on sharing information with our employees (see “History” p.13). To strengthen the Group cohesion, we have used the CEO Headline as a vehicle for the CEO to share information about his activities and views within the Group in both Japanese and English. Other efforts made to foster our solidarity have included the formation of the Ajinomoto Group Food Committee PR Subcommittee in 2011, and internal panel surveys (launched in 2012) to assess the degree to which the Group employees understand and trust the Group management and have fostered a sense of unity. Our internal communication platform for the Group employees was upgraded from “A-LIVE,” an intranet site, to “Workplace,” an internal social media site, in July 2020. “Workplace” features “Global CEO News” and “Japan/Global Aji News,” which introduces the activities of the Group employees via “Workplace.” The Group employees can also use the website to search for and use the Group-related articles released by the media.



Ashita no Moto on the Web

Taking corporate communications to the next level (4)

— Umami PR and direct communication

Our public communication activities related to umami further advance “AJI-NO-MOTO®” reevaluation efforts made under the “Ajinomoto Renaissance,” a program organized in 2009 on the occasion of our 100th anniversary.

Since Dr. Olney Shock and Chinese Restaurant Syndrome of the 1960s (see “History” p.5), the negative perception of monosodium glutamate (MSG) has yet to be eliminated from the public mind, despite conclusive evidence of its safety. We worked to change this perception, actively encouraging a focus more on umami than on AJI-NO-MOTO® through collaboration with

the Umami Information Center, a nonprofit organization. Unfortunately, the public developed a confused sense of the relationship between umami and MSG, and the promotion of MSG had to mostly be done indirectly. The negative connotation of *AJI-NO-MOTO*[®], which was also the company's name, threatened to hamper efforts to improve corporate value. Thus, deciding that it would need to promote the idea of "umami = *AJI-NO-MOTO*[®]" globally and proactively in order to impart the proper perception to a generation that had never heard of MSG safety issues, we dedicated ourselves to effective umami communication. One example of the above-mentioned efforts was calling on television broadcasters and government offices not to release erroneous information.

We also added more spokespeople to talk about the value and importance of umami around the world. To achieve quicker success with these efforts, we held the World Umami Forum in the U.S. in 2018 (see "History" p.80).



The World Umami Forum panel discussion (left), cooking contest (right)

At a time when consumers are being increasingly inundated with social media and other new forms of media, we are also engaging in direct communications with consumers to form direct connections with and create more our fans. Visiting lecture of "The Secrets of Dashi and Umami" started in FY2006, is an example of our emphasis on providing dietary education. As of the end of FY2019, these lectures have taught roughly 120,000 elementary school students about the wonders of *dashi* and umami, the heart of Japanese cuisine. In addition to these lectures, tours provided by our plants and the Ajinomoto Group Umami Science Square (Kawasaki Plant, launched in April 2015) have informed more than 50,000 consumers a year about our social value building activities and products.



Visiting lecture of "The Secrets of Dashi and Umami"



Meanwhile, Ajinomoto Monitoring Consumer Surveys (AMC) have been conducted once every three years since 1978 as a means to keep track of changes concerning consumer eating habits and attitudes. In response to Japan's changing demographic landscape, the survey was expanded in FY2012 to include homemakers in their 70s.



The Ajinomoto Group Umami Science Square



The Overview of the Ajinomoto Group

Fiscal Years 2009 - 2019

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Eat Well, Live Well.

