Help Extend the Healthy Life Expectancy of 1 Billion People

Initiatives to solve nutritional issues P037
Cooking and sharing meals P047
Medical foods P048
Disseminating information on MSG safety and benefits P049
Addressing health issues P051

Initiatives to solve nutritional issues

Approach to nutrition

Strategy

The Ajinomoto Group supports consumers in achieving nutritionally balanced diets through our business activities. Around the world, an increasing number of people suffer from health problems stemming from diets and lifestyles, including the excessive intake of sugar, fat, and salt, and the insufficient intake of protein and vegetables. In response, the Ajinomoto Group implements efforts to improve nutrition as a way to solve such health problems based on the Group Shared Policy on Nutrition and the Ajinomoto Group Nutrition Strategy Guidelines. These initiatives are based on the principle of Nutrition Without Compromise.

> ASV Report 2025 (Integrated Report) P069-070
> Nutrition Without Compromise
> Group Shared Policy on Nutrition

The three pillars of our approach to nutrition

- Without compromising taste

The Ajinomoto Group continues to develop and sell healthy products (salt reduction, etc.), and we do so without compromising on taste. By providing seasonings such as umami seasoning (MSG), we contribute to delicious and healthy meals.

- Without compromising access ~delivering nutrition to everyone~

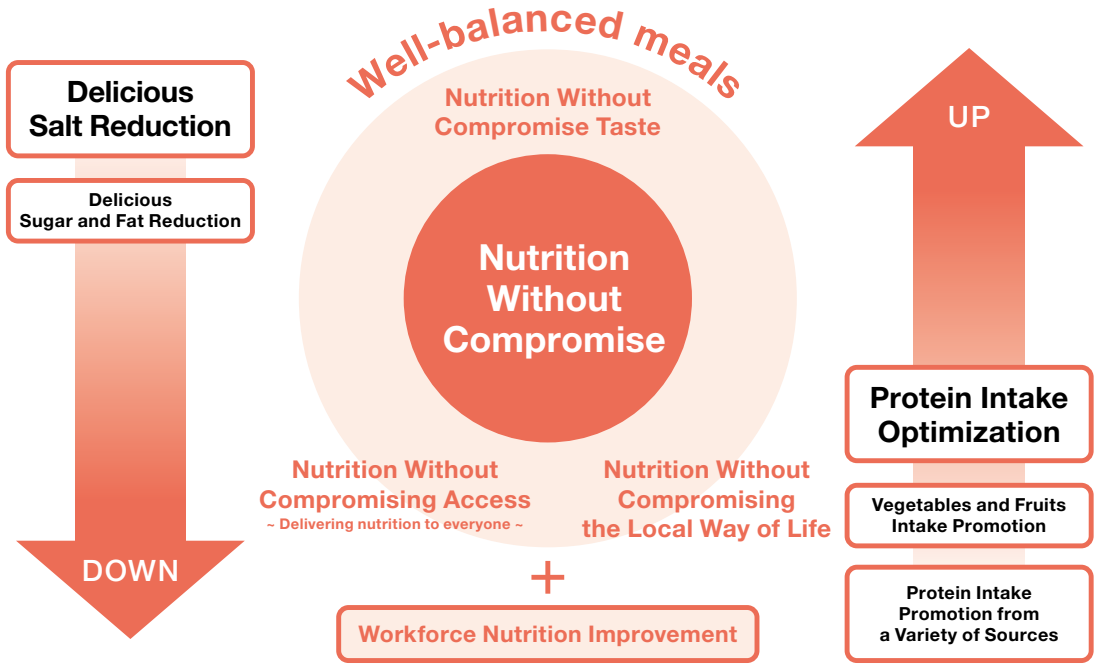
Through innovation using “AminoScience” and distribution initiatives, we will help make nutritious meals more accessible than ever before in terms of availability, affordability, and convenience.

- Without compromising the local way of life

When expanding our businesses globally, we adapt our operating models to respect national and local customs, food preferences, resources, ingredients, and stakeholders. While communities and economies grow and shift, our emphasis on personalization becomes even more relevant.

The Ajinomoto Group provides nutritious foods that taste good, are convenient and easily accessible, and respect local customs and flavors. At the same time, we are also committed to protecting the sustainable global environment on which such food based.

Ajinomoto Group approach to nutrition



Framework for nutrition management

Governance

The Sustainability Committee formulates nutrition-related policies and strategies, follows up on business unit activities, and collects related information from these units in the same manner as environmental and human rights initiatives. The committee reports this information to the Executive Committee and the Board of Directors. The Board of Directors oversees Company efforts and progress in addressing the risks and opportunities (including on nutrition) identified based on materiality for the Ajinomoto Group.

Roadmap to one billion people

Strategy and Results

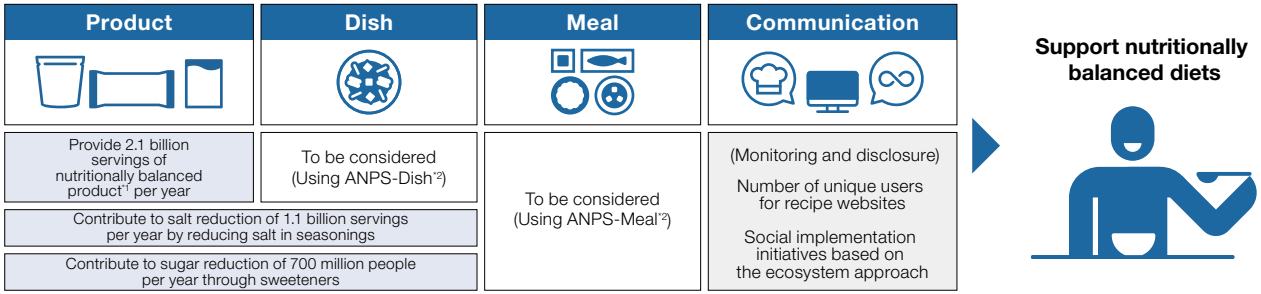
The Ajinomoto Group pursues initiatives for nutrition improvement to help extend the healthy life expectancy of one billion people by 2030. In fiscal 2024, we created touchpoints for deliciousness and health with 950 million people. Going forward, we will continue to contribute to extending the healthy life expectancy of one billion people by promoting "delicious salt reduction" through umami and providing products and information that are useful for health.

Targets and KPIs for nutrition

Framework / Performance

The Ajinomoto Group updated our targets and KPIs for nutrition to further drive nutrition improvement through our business, in line with our Purpose and Material Theme of achievement well-being through food. We adopted nutritional assessments appropriate for each product, dish, and meal to support consumers' nutritionally balanced diets and added indicators for communication that contribute to nutrition improvement.

Targets and KPIs for nutrition through FY2030 (Launched operation in FY2025)



- **For products consumed as-is, the Health Star Rating (HSR), which is used globally and provides a comprehensive assessment of nutritional value, is used for evaluation.**
- **Since dishes and meals are greatly influenced by food culture and combinations, appropriate evaluation methods will be considered for each country/region.**
- **Provide recipes, services, and systems to make it easier for consumers to practice nutritionally balanced diets.**

*1 Products with HSR rating 3.5 or above. Includes products that can be consumed as-is, by adding water, by heating, or through other simple preparation (e.g., soups, beverages, frozen foods, instant noodles).
*2 The Ajinomoto Group Nutrient Profiling System. NPS developed by the Ajinomoto Group. ANPS-Dish is for dish evaluation, and ANPS-Meal is for meal evaluation.

Results through FY2024

	FY20 (Results)	FY21 (Results)	FY22 (Results)	FY23 (Results)	FY24 (Results)	FY25 (Targets)	FY30 (Targets)
Percentage of products with improved nutritional value[3] [4]	40%	50%	56%	57%	57%	—	60%
Provision of products with improved nutritional value in "delicious salt reduction" and "protein intake optimization"[4]	280 million	320 million	340 million	350 million	360 million	—	400 million
Availability of products utilizing the physiological and nutritional functions of amino acids[5]	(Base year)	1.07 times	1.10 times	1.07 times	1.11 times	—	2 times
Nutrition education for employees[6]	Cumulatively 460	Cumulatively 26,000	Cumulatively 56,000	Cumulatively 88,000	Cumulatively 122,000	Cumulatively 100,000	—

[3] Products with improved nutritional value refers to the products that meet our criteria and contribute to the intake of improved nutrition from an international public health perspective.
[4] The confirmation and reporting of this target has ended in fiscal 2024. From fiscal 2025, we have begun applying the aforementioned new targets and KPIs to enable more objective and appropriate evaluation, thereby further promoting key initiatives for nutrition improvement.
[5] This target will continue to be managed under the targets and KPIs for our Material Theme of contribution to advanced medicine and prevention.
[6] This target will continue to be managed under the targets and KPIs for our Material Theme of reinforcement of our management foundation.

> Nutrition > Ⅲ. Targets and KPIs

Efforts to ensure nutritionally balanced diets - Nutrition Without Compromise

Performance

Use of nutrient profiling systems

The Ajinomoto Group began operating the Ajinomoto Group Nutrient Profiling System for Products (ANPS-Product) in 2020 as a Group-wide basic tool. This system evaluates the amount of nutrients in a product using science and improves nutrition through new product development and product revisions. ANPS-Product is based on HSR.

As of March 2024, the system has been introduced in 16 Group companies in 13 countries, evaluating the nutritional value of close to 900 products. However, ANPS-Product and conventional NPS[1] faced limitations in assessing seasonings and other products that are normally not eaten on their own as a self-standing food item. In response, we began developing an NPS to evaluate the nutritional value of dishes prepared with seasonings and other such products. We launched ANPS-Dish in December 2021 as the world's first nutrient profiling system to take Japan's food culture and health issues into consideration, making it possible to assess the nutritional value of dishes prepared with seasoning products. We also developed ANPS-Meal, a nutrient profiling system for meal assessments, to evaluate the nutritional value of actual Japanese meals, which are typically based on the *ichiju-sansai* (one soup, three dishes) structure.

Conventional NPS systems were developed mainly for overnutrition in Europe and the U.S., preventing direct use of these systems in Asian regions, which face different nutritional challenges (e.g., undernutrition) and food cultures. Recognizing the need to develop an NPS suitable for local regions, the Group is first reaching out to academia and governments in the ASEAN region.

For example, sugar intake in Thailand is estimated to be about four times the WHO's recommended level, while salt intake in the country is approximately 1.6 times higher. To help address this issue, the Ajinomoto Group signed a Memorandum of Understanding (MOU) with the Institute of Nutrition at Mahidol University, a leading institution in nutrition research in Thailand, and the Thai Dietetic Association. This partnership aims to develop a Nutrient Profiling System for Thai menus (NPS-M). We also presented NPS-M at the Southeast Asia Public Health Nutrition Conference 2024 (SEA-PHN), highlighting the system's potential to support healthier eating habits without compromising taste, and to help reduce the risk of obesity and non-communicable diseases (NCDs).

People in the ASEAN region often eat food prepared at home or at street stalls, resulting in a high level of interest in assessing the nutritional value of dishes to improve nutrition not seen in Europe and the U.S.

The Ajinomoto Group will continue to collaborate with academia to provide society with products and services that help make eating nutritionally balanced meals easier for consumers. In addition, we plan to develop ANPS-Dish and ANPS-Meal in accordance with the food culture of each country, and expand globally to ASEAN, Latin America, and other regions.

> ASV Report 2025 (Integrated Report) P069

Delicious salt reduction

The Ajinomoto Group aims to extend the healthy life expectancy of one billion people by 2030. One of our key initiatives is to limit excessive salt intake, a nutritional challenge in the Asian region, including Japan. The Ajinomoto Group works with various stakeholders to promote "delicious salt reduction" using "AminoScience" as we use various media to encourage customers to reduce their salt intake.

> Delicious Salt Reduction

■ Smart Salt initiatives

In July 2020, Ajinomoto Co., Inc. launched the Smart Salt® Project to address the issue of excessive salt intake among the Japanese population. We work with government agencies, universities, and other companies to encourage the use of umami and dashi (broth) to practice "delicious salt reduction" among people of all ages. We also work to leverage our strengths in the Smart Salt® Project in Japan to engage in activities overseas that encourage delicious salt reduction. Ajinomoto Co., Inc. launched a total of 56 low-sodium products under 25 brands in nine countries as of April 2025. When launching low-sodium products, we utilize our owned media and advertisements to raise awareness of the importance of low-sodium diets and propose low-sodium recipes. Furthermore, we collaborate with KOL and outside organizations to hold study sessions and lectures on salt reduction and continue to raise awareness on delicious salt reduction among consumers in various countries.

In fiscal 2024, the Ajinomoto Group created and distributed 100,000 booklets to 10,000 locations across Japan to support dietitians in providing nutritional guidance. We also developed reduced-salt recipes tailored to the taste preferences of pregnant women with salt-reduction needs.

> Products That Help Delicious Salt Reduction (Japanese only)
> Smart Salt Recipe Site (Japanese only)

■ Overseas initiatives (Vietnam)

We launched the low-sodium Aji-ngon® flavor seasoning in the Vietnam in October 2024.

Aji-ngon® is gaining shelf presence, particularly in major supermarkets. Customers have praised the seasoning's well-balanced flavor and salt level, which support both taste and health in everyday meals. We are running digital campaigns on TikTok and other digital platforms with our key message of *Salt Reduction,*

Still Delicious, to encourage more first-time purchases from a broader range of consumers.

Advertisement for Aji-ngon®
Giảm Muối vẫn Ngon. Cut the Salt, Keep the Taste.

■ Overseas initiatives (U.S.)

Ajinomoto Health & Nutrition North America, Inc. is expanding its Salt Answer™ line for the commercial market in North America. Studies show that Americans consume 50% more sodium than recommended, with nearly 70% of intake coming from packaged and restaurant foods. Salt Answer™ reduces sodium content by up to 30% without compromising taste and flavor. Ajinomoto Health & Nutrition North America develops customized products for use in various applications, including soups, snacks, and dressings. The company will continue to expand its portfolio of low-sodium solutions globally while addressing the specific needs of the North American market.

> Ajinomoto Health & Nutrition North America

■ Quantifying salt reduction using umami

In 2020, the Ajinomoto Group began collaborating with academic institutions on the U20 Healthy Umami Research Project, aiming to pursue our proposal of using umami for delicious salt reduction. This project is a study to estimate the extent to which umami can reduce salt intake at the national level. Based on data from countries with different food cultures derived from Japan, the U.S., and the U.K., the U20 Healthy Umami Research Project found that an additional 13% to 22% "delicious salt reduction" is possible per day in processed foods. We plan to engage in activities to raise awareness and spread the value of "delicious salt reduction" through umami.

> Nature Forum Reducing Salt in Our Diets

■ Salt reduction through electric seasoning

Ajinomoto Co., Inc., in joint research with the University of Tokyo III/GSII and Ochanomizu University, developed the world's first "electric seasoning" technology, which uses transcutaneous electrical stimulation to adjust the taste of food. This technology uses weak electrical stimulation to the lower jaw and back of the neck to modulate taste electrical through electrical taste stimulation.

Conventional methods apply electrical stimulation to the tongue through current-conducting tableware, enhancing flavor while the tableware is in contact with the mouth. This approach has been used with liquid-based foods. In contrast, our electric seasoning device delivers continuous electrical stimulation during chewing and swallowing when worn, making it suitable for use with solid foods.

The joint research demonstrated that transcutaneous electrical stimulation enhances perception of saltiness across a variety of reduced-salt foods, including liquids, solids, and Japanese, Western, and Chinese dishes. These findings were published in Hypertension Research[1]. A separate study examining the continuous effects during the stimulation period of transcutaneous electrical stimulation received the Topics Award at the 2024 annual meeting of the Japan Society for Bioscience, Biotechnology, and Agrochemistry[2].

Furthermore, Ajinomoto developed a concept for a wearable device designed to support the use of electric seasoning when worn around the neck or over the ear. We are continuing to refine the design of this concept. Wearing this device eases the burden on individuals who need to limit their salt intake while also preserving "delicious salt reduction." Ajinomoto will continue developing new services that incorporate this wearable device.

[1] An international academic journal published by Springer Nature, focused on original clinical and basic research in the field of hypertension.
[2] An academic society formed by research institutions and organizations in the fields of agricultural chemistry, bioscience, and biotechnology.

Protein intake optimization

The Ajinomoto Group strives to improve protein intake by enhancing the flavor of protein-rich meals with seasonings, offering soups and other products that provide convenient sources of protein, and supplying amino acids that complement low-quality protein sources. We also share recipes, menus, and other information on our website and social media.

■ Developing technology to evaluate the nutritional value of protein

Recently, in the interest of sustainability and reducing environmental impact, it has become increasingly important to intake protein from a variety of sources, not just from animals but plants as well. However, plant protein is generally known to be less digestible and absorbable than animal protein. Developing precise technologies to evaluate and improve digestibility is crucial to increasing the nutritional value of plant protein.

In 2013, the Food and Agriculture Organization of the United Nations (FAO) proposed a new indicator, the Digestible Indispensable Amino Acid Score (DIAAS). This indicator can more accurately assess the nutritional value of protein (protein quality) by taking into account the balance of essential amino acids absorbed from food and the digestibility and absorption rates of protein. Under these circumstances, the Ajinomoto Group focuses not only on the quantity of protein but also on quality and digestibility. We are also engaged in research to evaluate and improve DIAAS levels through the utilization of amino acids and food processing technologies. We gave an oral presentation at the 8th International

Conference on Food Digestion (Portugal) in 2024 on the results of our research into rapid and precise DIAAS prediction technology that accounts for changes in digestibility due to food processing and cooking processes. We also introduced a digestibility test method using artificial intestinal fluid (INFOGEST protocol) and are conducting nutritional epidemiology research focusing on DIAAS in a socially cooperative course with the University of Tokyo. Through these efforts, we advance further research and development to expand the value of highly digestible proteins worldwide. Going forward, we will develop our products and provide services to contribute to people around the world at higher levels, encouraging the consumption of needed nutrients from a variety of food sources and fostering healthy and nutritious dietary habits in consideration of the global environment.

■ Developing products that provide easy access to high-quality protein (Japan)

As the protein market expands, demand is rising for protein products that pair well with meals without cooling the body, while also complementing traditional Japanese diets centered on white rice[1]. In response, Ajinomoto Co., Inc. launched Ajinomoto KK Protein Miso Soup in March 2025. This soup offers a simple way to prepare and conveniently consume protein.

One cup of Ajinomoto KK Protein Miso Soup provides 20 grams of protein and can be enjoyed easily with meals, between meals, or after exercise by simply adding hot water.

The nutritional value of protein depends on the balance of essential amino acids that make up the protein. Proteins are rated on a scale of up to 100 using the amino acid score, which measures how well a protein provide essential amino acids to the body. Generally, a higher score indicates better amino acid balance and higher protein quality. Ajinomoto KK Protein Miso Soup scored a perfect score of 100.

We also sell Ajinomoto KK Protein Soup (Corn Cream) as a part of the same series, striving to support convenient and enjoyable protein intake optimization as part of daily life.

[1] According to our research.

Delicious sugar and fat reduction

The Ajinomoto Group is focusing on developing alternative sweeteners and kokumi, and improving the taste of our products and those of our business customers with enhanced ingredients and formulation technologies.

■ Sugar reduction (Thailand)

Market research shows a growing demand for less sweet and sugar-free products in Thailand stemming from increased health awareness. In response to these needs, AJINOMOTO COMPANY (THAILAND) LIMITED launched Birdy® 3in1 Rich Blend, the first sugar-free powdered milk coffee in the Thai coffee market, in 2023, followed by Birdy® Robusta Zero, the first sugar-free canned milk coffee, in 2024. Sales of these products, along with Birdy® Robusta Zero, the existing sugar-free black coffee, grew to 151% in fiscal 2024 year on year, outpacing the market. Ajinomoto Thailand strives to combine rich flavor with health benefits to help Thai consumers reduce sugar intake.

■ Controlling sugar absorption (Japan)

Markets for products that suppress sugar absorption are expanding in Japan. This trend reflects growing concerns about excessive sugar intake, even with white rice, a staple food in the country, resulting in more consumers turning to brown rice, reduced-sugar rice, and other alternatives. Internal research shows that consumers are dissatisfied with these substitutes. Common concerns include inferior taste and texture compared to white rice, the added effort of cooking them separately for certain family members, and reduced flexibility when the entire household must eat the same rice regardless of dietary needs. In response to these concerns, Ajinomoto Co., Inc. launched *Hakumai Dozo*®, Japan's first rice cooker seasoning that helps prepare white rice with a gentler sugar absorption profile.

Hakumai Dozo® uses proprietary technology (patent pending) developed through over 30 years of enzyme research. Adding *Hakumai Dozo*® when cooking rice modifies the starch structure to slow down digestion, allowing white rice to be prepared with a glycemic index (GI)[1] comparable to that of brown rice. A survey of 1,000 dietitians found that 97% of respondents believe *Hakumai Dozo*® helps support the dietary management of individuals who need to monitor their sugar intake. According to internal research, customer feedback indicates that consumers appreciate being able to manage their health without making special adjustments to family meals, and they report no noticeable difference in the taste or texture of the rice.

Consumers have responded positively to the ability of *Hakumai Dozo*® to maintain the taste and texture of white rice while moderating sugar absorption. Cumulative sales surpassed our initial forecast by nearly double, exceeding 1 million servings within the first 10 months after product launch in March 2024.

[1] Glycemic Index (GI): An indicator of how easily the sugar in a food are digested and absorbed by the body.

■ Fat reduction (Thailand, Indonesia)

The Ajinomoto Group develops and markets a reduced-fat seasoning for fried chicken that lowers oil absorption during cooking in Southeast Asia, where fired foods are consumed more frequently, as more people look for ways to enjoy these dishes while maintaining their health.

Indonesia: Launched in August 2023

Thailand: Launched in August 2024

Encouraging vegetable and fruit intake - *Love Vege* Project

By providing seasonings and frozen food products, the Ajinomoto Group promotes the intake of vegetables and fruits, which are sources of nutrient intake such as vitamins and minerals. For example, our product packaging displays recipes that encourage consumers to eat more vegetables and fruits.

In Japan, we promote the *Love Vege* project to encourage vegetable intake as a way to support the recommendation by the Ministry of Health, Labour and Welfare to consume at least 350 grams of vegetables per day. We launched this project in 2015 at the Nagoya branch, Nagoya branch office to encourage people to eat more vegetables in Aichi Prefecture, which ranked lowest in vegetable intake in Japan. We began expanding the project nationwide in 2020, establishing 27 ecosystems nationwide in 2023 in collaboration with various parties in industry, government, academia, and other sectors. Here, we developed recipe booklets unique to each region that include menus using locally produced vegetables to increase vegetable consumption. Booklets are distributed through the produce sections at mass retailers to raise awareness. Furthermore, we hold in-store events that use vegetable consumption measurement devices and promote interest in vegetables and natural eating habits for vegetables among children and young adults through our website and social media.

The Ajinomoto Group collaborated with two prefectures, four municipalities, three ordinance-designated cities[1], and three regional retailers in the Kinki region to implement awareness activities at supermarkets as part of our fiscal 2024 initiatives. These activities included distributing *Love Vege* menu booklets, hosting vegetable quizzes, and using vegetable intake measurement devices in June 2024 and February 2025. We encouraged interest in seasonal vegetables from the Kinki region and proposed ideas for incorporating them into everyday meals. Local media covered these efforts, helping us share the information with a wide range of consumers. In March 2025, the Ajinomoto Group held a vegetable harvesting and cooking event in Nagasaki Prefecture in collaboration with local supermarkets, farmers in Shimabara City, and the Nagasaki Prefectural Government to encourage vegetable consumption. Participants used cabbage harvested from the fields to prepare a Cook Do® Hoikoro dish using cabbage. Not only did local media also covered this event, but the event also received positive feedback from numerous participants. The Ajinomoto Group will continue to collaborate with our partners to develop *Love Vege* activities in various contexts and work together with the community to solve nutritional issues.

[1] Osaka Prefecture, Osaka City, Hyogo Prefecture, Kobe City, Kyoto Prefecture, Kyoto City, Shiga Prefecture, Nara Prefecture, Wakayama Prefecture.

Love Vege in-store event

Harvesting and cooking event in collaboration with Nagasaki Prefecture

Improving nutrition through community initiatives

The Ajinomoto Group values a comprehensive approach to health, providing well-balanced meals that match the dietary habits and food preferences of each country and region. Our efforts include providing nutrition that meets the diverse values of each individual regarding lifestyles and food and providing nutritious meals at schools and hospitals.

■ Seminars for nutritionists and dietitians

Ajinomoto Co., Inc. has conducted the on-demand Food and Health Seminar in Japan for over 20 years. The seminar consists of overviews of our initiatives and expert presentations for registered dietitians and licensed nutritionists who support consumer health through food. The seminar aims to build trust with nutrition professionals, expand awareness and increase the fan base for our products and services, and foster partnerships that help advance Ajinomoto Group Creating Shared Value (ASV).

The fiscal 2024 seminar focused on salt reduction, protein intake optimization, and "AminoScience," attracting approximately 3,500 viewers. Attendees gave particularly positive feedback on our efforts to encourage salt reduction and balanced nutrition. A post-seminar survey indicated that about 90% of respondents said the content was useful, and around 80% expressed expectations for Ajinomoto initiatives to address food and health challenges.

We will continue raising awareness of the importance of salt reduction and balanced diets by sharing information with key opinion leaders and strengthening relationships with them, contributing to the extension of healthy life expectancy.

■ Nutritionally balanced diets (*Tsujitsuma Shiawase*)

Tsujitsuma Shiawase is a new approach to nutritional balance that focuses on adjusting nutritional balance over a period of time such as before and after meals, rather than pursuing a single perfectly balanced meal. In fiscal 2024, the number of participating companies increased to 15, and the number of menu proposals on the website grew significantly. Each menu displays the *Tsujitsuma Shiawase* mark, which indicates alignment with four key nutrients and food groups linked to extending healthy life expectancy, making it easy for consumers to practice balanced eating. The Ministry of Health, Labour and Welfare featured this initiative as a leading example of business collaboration in the fiscal 2024 report on the Healthy and Sustainable Food Environment Strategy Initiative.

We are committed to proposing new, easy and fun methods and approaches to eating nutritionally-balanced diets that ensure

well-being by allowing consumers to enjoy what they want to eat in that moment.

■ List of participating companies (as of March 2025)

*In no particular order

Ajinomoto Co., Inc. Ezaki Glico Co., Ltd., every, Inc., Kikkoman Corporation, Meiji Co., Ltd., Nissin Foods Holdings Co., Ltd., SB Foods Inc., J-OIL MILLS, INC., House Foods Corporation, and six others

Tsujitsuma Shiawase mark

Comprehensive Balance Type

JANPS® High overall JANPS®[1] score and good nutritional balance

[1] Japan Nutrient Profiling System (JANPS®): A nutritional profiling system suitable for the food culture in Japan, developed by Ajinomoto Co., Inc. as a new method to eat a nutritionally balanced diet.

Specific Nutrient Type

25% above/below target intake of nutrients and ingredients for vegetables, protein, saturated fatty acids, and salt (table salt equivalent).

> *Tsujitsuma Shiawase* Website (Japanese only)

■ Addressing maternal and child nutrition (Vietnam)

In December 2020, AJINOMOTO VIETNAM CO., LTD. launched the Mothers & Children Project with the Ministry of Health of Vietnam to improve the nutrition of mothers and children. The company rolls this project out nationwide.

As a part of the project, the company developed project software that provides nutritionally balanced menus, containing more than 1,300 dishes for mothers and more than 700 dishes for children. The nutritionally balanced menus were developed based on the nutritional standards of the National Institute of Nutrition–Ministry of Health. We deployed the project software through a nationwide medical and healthcare network, the Vietnam Women's Union, online and offline communications activities, and the media, and provided training to health officials and mothers. The software is also equipped with functions that include a dietary habit checking tool and a quick health monitoring tool. As of March 2025, the Mothers & Children Project expanded to 63 provinces and cities, with approximately 1.5 million mothers and health officials using the software. Looking ahead, we will continue to support the improvement of maternal and child nutrition in Vietnam.

■ Addressing nutritional issues in childhood and adolescence through school meals (Vietnam, Indonesia)

Many children in Vietnam suffer from stunted growth or low body weight, especially in rural areas. At the same time, a growing number of children in urban areas are overweight or obese. AJINOMOTO VIETNAM CO., LTD. launched the School Meal Project in 2012 in collaboration with central government ministries, including the Ministry of Education and Training and the Ministry of Health. Together, the company engages in various activities to deploy the project nationwide to provide nutritionally balanced menu development software, food nutrition education materials, and model kitchens for primary boarding schools.

As of March 2025, School Meal Project activities have expanded across 62 provinces/cities and 4,367 primary boarding schools.

The new President of Indonesia, Prabowo (who took office in October 2024), is highly concerned about the high percentage of stunted growth in Indonesian children. This issue strongly affects the Indonesia's human resources and his administration's vision to realize Golden Indonesia 2045, which aims to shift the country's status from developing to developed. The President focuses his administration on the Free Nutritious Meal Program (Makan Bergizi Gratis; MBG) as a strategic step, targeting 83 million beneficiaries, including school-age children, toddlers, and pregnant and breastfeeding mothers.

PT AJINOMOTO INDONESIA (PTA) improves the nutrition of Indonesian children with our School Lunch Program (FY18 – FY23) through our ongoing ASV initiatives, aiming to support the Indonesian Government with our expertise. In fiscal 2024, PTA launched a pilot program with an MBG kitchen in the West Java Area. This program included upskilling workshops for kitchen staff and menu cataloging using PTA products, helping to improve the quality of the food served and the efficiency of the kitchen itself.

PTA also recognizes the need to provide nutrition education to mothers throughout Indonesia, who are the main providers of nutrition in Indonesian families. PTA Health Provider ambassadors were dispatched through an event titled GEMBIRA (Gerakan Masak Bergizi Bersama Ajinomoto Health Provider; Nutritious Cooking Movement with Ajinomoto Health Provider) and provided nutrition education to 8,433 mothers from the PKK (Community Family Welfare Organization) women's association in 40 areas throughout Indonesia between fiscal 2022 and fiscal 2024. The ambassadors also shared information about the importance of balanced nutrition, Bijak Garam (Salt reduction: Smart Salt), facts about MSG, and details on PTA products through cooking demonstrations. Through these activities, PTA addresses the social issue of child nutrition in Indonesia as a part of our ASV initiatives.

Improving nutrition in the workplace

The Ajinomoto Group believes that employee health is one of our most important foundations. We are focused on improving employee nutrition in the workplace and nutrition literacy.

■ Workforce Nutrition Alliance

In March 2022, the Ajinomoto Group became the first Japanese company to join the Workforce Nutrition Alliance (WNA). This organization was launched by the Consumer Goods Forum (CGF), an international organization that brings together consumer goods retailers and manufacturers, and the Global Alliance for Improved Nutrition (GAIN), and international nutrition improvement NGO, to promote workforce nutrition improvement. To date, 17 companies[1] in Japan and overseas have conducted self-assessments based on company-specific guidelines on Group assessment criteria. Each of these companies conduct nutritional improvements in the workplace with regard to four important points (healthy food at work, nutrition education, nutrition-focused health checks, and breastfeeding support) through the self-assessments, applying the Plan-Do-Check-Act cycle and collaborating with Ajinomoto Co., Inc.

Ajinomoto Co., Inc. supports efforts to improve workforce nutrition by suggesting countermeasures for shared issues identified from the self-assessment results of the Group companies and the Ajinomoto Group Engagement survey (the category of Health and Well-being), as well as by providing each company with the Group's best practices, tools developed by the WNA, and examples of initiatives by WNA membership companies.

[1] The 14 companies at the time of joining the WNA were Ajinomoto Co., Inc., Ajinomoto AGF, Inc., Ajinomoto Food Manufacturing Co., Ltd., Ajinomoto Fine-Techno Co., Inc., Ajinomoto Frozen Foods, Co., Inc., Ajinomoto Co., (Thailand) Ltd., Ajinomoto Sales (Thailand) Co., Ltd., PT AJINOMOTO INDONESIA, PT AJINOMOTO SALES INDONESIA, Ajinomoto Vietnam Co., Ltd., Ajinomoto Health & Nutrition North America, Inc., Ajinomoto Foods North America, Inc., AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA., and S.A. Ajinomoto OmniChem N.V., and three companies (AJINOMOTO DEL PERÚ S.A., Ajinomoto Poland Sp. z o.o., and Agro2Agri, S.L.,), resulting in a total of 17 total companies and approximately 70% of the Group's total employees.

> WNA CASE STUDY BOOKLET
> Nutrition Without Compromise: The Ajinomoto Group Case Study
> Progress Report of Ajinomoto Group's Commitment to Workforce Nutrition - The Consumer Goods Forum
> Nutrition Without Compromise: The Ajinomoto Group Case Study - The Consumer Goods Forum

■ Initiatives to support breastfeeding (Vietnam, Belgium)

AJINOMOTO VIETNAM CO., LTD. encourages all female employees to engage in the company breastfeeding support program. The company provides nursing employees with private spaces and designated break times for breastfeeding or pumping. The company has also offered special training under the Mother & Children Project since fiscal 2021 to support the health and well-being of pregnant and nursing mothers and mothers with children under five. In fiscal 2024, the program began incorporating guidance based on WHO breastfeeding guidelines.

S.A. AJINOMOTO OMNICHEM N.V. enhanced company policies from a DE&I perspective by extending the legally mandated breastfeeding leave period, allowing employees to take up to six months of childcare leave. Company employees also formed a working group to improve nursing room facilities and raise internal awareness.

■ Supporting employee health through the Dietary Balance Check Program

Ajinomoto Co., Inc. developed the Eat Well Check® program as part of our employee wellness efforts. This program supports healthier habits through self-monitoring of diet and physical activity. Eat Well Check® consists of three main elements: providing model meals (*Otehon Shokuji*®) with good nutritional balance, enabling users to record their meals in an app by checking recommended food groups they have consumed, and offering feedback based on the recorded data. *Otehon Shokuji*® is a menu we designed featuring meals that include items from 10 recommended food groups. We designed this menu based on the public Guidelines for the Management of Obesity Disease and the Guidelines for Prevention of Atherosclerotic Cardiovascular Diseases. The menu also incorporate our frozen stocked rice with integrated side dishes *Aete*®[1], which includes the aforementioned ten food groups. Eat Well Check® brings together these three components to increase employee interest in nutrition, build understanding of improving health through food choices, and encourage improvements to daily habits.

Ajinomoto Co., Inc. is a member of the Health and Productivity Management Alliance[2]. As a member, we recognize key challenges facing Japanese industry, including improving employee health, ensuring the financial stability of health insurance unions, and controlling medical costs. We view Health Management® not only as a way to enhance productivity and manage healthcare expenses but also as a core part of human capital management that values employees as key assets. The Ajinomoto Group considers the health of group employees and their families to be one of the most important management foundations, developing measures to improve workplace nutrition and maintain and improve self-care. Against this backdrop, Ajinomoto Co., Inc developed Eat Well Check® to support diverse work styles and raise employee awareness of poor dietary habits caused by irregular hours and increased dining out. We see behavioral changes among employees as essential to improving lifestyle habits and consider employee health as a key element in strengthening human capital. We tested Eat Well Check® with 110 participants, primarily employees with irregular working hours, including night shift and sales staff, over a period of three months. Results showed increased awareness of healthy eating, positive changes in dietary and exercise habits, and a greater variety of food groups consumed.

We will use these results to enhance our health management efforts by positioning Eat Well Check® as a behavior change program that supports the well-being of employees with diverse work styles. Going forward, Ajinomoto Co., Inc. will leverage this program to deliver food and health solutions. We will also support the Health and Productivity Management Alliance and other companies committed to health-focused management to help people lead healthier, more comfortable lives.

Frozen stock rice *Aete*®

[1] A complete meal of mixed rice topped with side dishes served in a frozen stock lunch box. Meals provide one-third of the daily recommended intake of vegetables content, salt equivalents, and dietary fiber (based on the Nutrition Labeling Standards (for adults, 2,200 kcal) and the Ministry of Health, Labour and Welfare *Health Japan 21* goal of 350 grams of vegetables per day). Meals can be stored in the freezer and heated in the microwave in just six minutes, making it easy to enjoy delicious, well-balanced meals even on busy days.

[2] The Health and Productivity Management Alliance is managed by nine representative organizers committed to strengthening employee health as a way to revitalize Japanese businesses and ensure sustainable health insurance. Participating companies and organizations amounted to 467 as of March 28, 2025. These entities identify data-driven issues, implement solutions, and evaluate various measures through collaborative health care with companies and health insurers. The alliance aims to co-create solutions that shape health management and create results for cross-industry implementation.

■ Initiatives to improve nutritional literacy (nutrition education)

The Ajinomoto Group began engaging in initiatives to improve nutritional literacy in fiscal 2020. We began expanding nutrition education through e-learning and other means to the entire Group in fiscal 2021. By the end of fiscal 2024, a total of 122,000 employees had completed the training, achieving our target of reaching 100,000 employees by fiscal 2025. Fiscal 2023–2024 Engagement Survey results showed improved scores not only in nutrition education and workplace nutrition initiatives but also in contributions to healthy lifestyles. Starting in fiscal 2025, the Ajinomoto Group will expand our nutrition education to support self-care and encourage learning that leads to action on societal nutrition challenges.

Main initiatives in fiscal 2024

- Implemented education across all Group companies in Japan and overseas titled Physical Activity and Sleep and nutritionally balanced diets.
- Developed and implemented training tailored to the employees' work shifts at each factory. DELICA ACE CO., LTD. provided multilingual content to a multinational workforce using a proprietary system.
- Shared best practices from two overseas companies (Agro2Agri, S.L. and AJINOMOTO (SINGAPORE) PRIVATE LIMITED) with the entire Group.
- Held a joint meeting at AJINOMOTO DO BRASIL INDUSTRIA E COMERCIO DE ALIM to advance WNA activities and collaboration among the Latin America Division (AJINOMOTO DO BRASIL INDUSTRIA E COMERCIO DE ALIM, AJINOMOTO DEL PERU S.A., and AJINOMOTO DE MEXICO, SOCIEDAD DE R. LTD. DE C.V.).

Initiatives to resolve nutritional issues

Performance

The Ajinomoto Group aims to deepen our understanding of global nutritional issues through participation in international conferences and dialogue with leaders around the world. We also aim to help resolve nutritional issues through global collaboration and by actively sharing our knowledge and expertise.

■ Initiatives at CGF Japan CHL

Ajinomoto Co., Inc. is a member of the Collaboration for Healthier Lives (CHL), a CGF coalition of action, an international trade association for consumer goods. As co-chair of CGF Japan CHL, Ajinomoto Co., Inc. works with like-minded companies to lead specific activities to solve health issues in Japan. In our efforts to reduce salt intake, we continue to uphold our agreement with Chiba City and are working together to spread awareness about salt reduction. Our initiatives for healthy aging help deepen knowledge in consumers about preventing frailty, helping them improve their own and their family members' dietary habits, especially through optimized protein intake optimization.

■ Ministry of Health, Labour and Welfare's Strategic Initiative for a Healthy and Sustainable Food Environment

In 2021, the Ministry of Health, Labour and Welfare (MHLW) held a study group on promoting the creation of a naturally healthy and sustainable food environment. This group was tasked with identifying nutrition issues that Japan needs to address and discussing how to solve them in the public and private sectors. Results from the group's studies were included in the Japanese government's commitment at the Tokyo Nutrition for Growth Summit 2021. Here, creating a food environment refers to the interrelated development of both access to food (ingredients, food preparation, and meals) and access to information so that people can enjoy healthier diets. As a business operator, the Ajinomoto Group has been actively promoting this initiative.

In fiscal 2024, the *Tsujitsuma Shiawase* project was selected as an example of a social implementation model using this initiative and was featured in the official activity report. Ajinomoto Co., Inc. collaborated with other participating organizations to propose reduced-salt recipe suggestions through the *Tsujitsuma Shiawase* project.

Ajinomoto Co., Inc. will continue our efforts in developing and sharing recipes for "delicious salt reduction" (520 dishes by fiscal 2025). Through these efforts, we are committed to reducing excessive salt (sodium).

> Strategic Initiative for a Healthy and Sustainable Food Environment (HSFE)

Improving product accessibility

Strategy

The Ajinomoto Group provides opportunities for nutritious meals through affordable and appropriately designed products tailored to the needs of consumers in each country and region.

In delivering these products, we go beyond simply modifying existing products or packaging. We strive to thoroughly understand the needs of target consumers in each country and region, and provide solutions tailored to local conditions and contexts.

The Ajinomoto Group expands our business through our own mail order and external e-commerce site, helping consumers purchase products anytime, anywhere. We have established a system to analyze the awareness and behavior of consumers through digital data. We provide products that meet the trends of users on e-commerce websites in Japan and overseas. At the same time, we have established our own distribution networks that include rural areas in developing and emerging countries with weak distribution mechanisms. In this way and more, we provide products not only through supermarkets, but also in grocery stalls within markets. We have adopted a cash-based direct sales model for staff to sell physical goods (products), depending on the conditions in each country or region. By communicating directly with shopkeepers and consumers, we exchange a wealth of information and deepen our understanding of consumer needs. In turn, this allows us to offer products more rooted in the local community.

We also establish reasonable prices and convenient product formats tailored to the lifestyle conditions in each country or region. For example, we offer a minimum standard size of our umami seasoning AJI-NO-MOTO® for 500 rupiah (about 5 yen) in Indonesia and for 4 pesos (about 10 yen) in the Philippines[1].

The Group strives to improve product availability and accessibility by utilizing digital data and collecting information through direct communications.

[1] Average exchange rate for fiscal 2024 was used to convert product prices into Japanese yen.

P.T.AJINOMOTO INDONESIA

AJINOMOTO PHILIPPINES CORPORATION

> Group Shared Policy on Product Accessibility

Cooking and sharing meals

Perceived well-being through the joy of cooking and sharing meals

Result

Ajinomoto Co., Ltd. partnered with Gallup, Inc. to conduct a global study on the relationship between cooking enjoyment, sharing meals, and well-being. We summarized these results in the report Wellbeing Through Cooking report released in December 2023. The World Happiness Report (WHR) 2025, released in March 2025, featured additional analysis based on data from this study, in which we collaborated with the University of Oxford to conduct. WHR2025 featured their first food-related chapter highlighting the growing interest in the link between food and well-being.

In April 2025, Ajinomoto Co., Inc. launched a partnership with the OECD Centre on Well-being, Inclusion, Sustainability and Equal Opportunity (WISE) , alongside our ongoing collaboration with the University of Oxford, based on these findings. We are committed to deepening our understanding of how food contributes to well-being as we strive to offer a wider range of products that contribute to well-being, encouraging the joy of cooking and sharing meals to contribute to emotional enrichment.

Survey Result Excerpts

Those who enjoy cooking and sharing meals experience a stronger sense of well-being

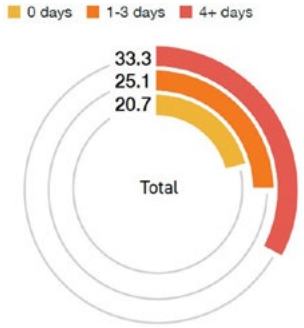
Cooking Enjoyment and Subjective Well-Being

People who said they enjoyed cooking in the past seven days were 1.2 times more likely to thrive than people who did not enjoy cooking or had not cooked during that time.

Source: Wellbeing Through Cooking

Eating Together and Thriving

Those who shared meals with other people four or more days a week were 1.6 times more likely to thrive than those who did not share meals.



Source: Wellbeing Through Cooking

Correlation Between Sharing Meals and Thriving

Survey results found that, around the world, people who share meals more frequently are more likely to report higher levels of subjective well-being

Source: World Happiness Report 2025

> Wellbeing Through Cooking
> World Happiness Report 2025 | The World Happiness Report

Medical foods

Medical foods for fulfilling special nutritional needs

Performance

The Ajinomoto Group leverages expertise in "AminoScience" to improve quality of life by balancing medical nutritional requirements with good taste. Ajinomoto Cambrooke, Inc. develops and manufactures medical foods to meet the particular and advanced nutritional needs related to diseases including disorders of amino acid metabolism. The company markets its products in approximately 20 countries worldwide, mainly in North America and Europe. Nualtra Ltd. develops oral nutritional supplements (ONS) for people who are unable to obtain adequate nutrition from their normal diet due to illness or aging. The company also develops foods to replace entire meals to help treat type 2 diabetes (TDR) and special powdered foods (Dysphagia Powder) for patients who have difficulty swallowing. The company markets these products in the UK and Ireland.

Nearly 5% of the total population in the UK is malnourished[1], and the number is reported to be on the rise. Estimates say that nearly 150,000 people in Ireland are at risk of malnutrition, with approximately 4% of children under the age of four years undernourished and underdeveloped, and 59% of children with multiple disabilities at nutritional risk, 15% of whom are severely malnourished. We continue to develop and market medical food products that contribute to health and well-being.

Nualtra is also working to improve the quality of life for more people by developing products not only for traditional patients, but also for a wider range of conditions, including allergies, stunted growth, and liver disease. The company launched its first pediatric food products, Altrini®, in the United Kingdom in 2025. Incidentally, Nualtra has been the fastest-growing medical food company in the UK and Ireland medical food market for eight consecutive years.

The Ajinomoto Group continues to offer innovative solutions and better value to healthcare professionals, and a better medical nutrition experience for patients. These offerings help us co-create social and economic value.

[1] Source: The National Institute for Health and Care Excellence (NICE).
[2] Source: Malnutrition in Ireland - HSE.ie

> Malnutrition in Ireland - HSE.ie

Altrini® pediatric food product

Disseminating information on MSG safety and benefits

Activities to promote a correct understanding of MSG

Strategy

The Ajinomoto Group was the first company in the world to commercialize glutamic acid as a seasoning. Glutamic acid (a type of amino acid) is an ingredient in *umami* taste, and we have globally publicized its usefulness. Monosodium glutamate (MSG), an umami seasoning, improves flavor, reduces salt intake, shortens cooking time, and reduces the cost of meals at schools and other facilities. These benefits generate various forms of value.

Yet at the same time, MSG has been the subject of nebulous anxieties among consumers for many years as a purported chemical harmful to health. Food packaging with labeling indicating that a product is chemical additive-free has been one of the factors behind this misunderstanding; however, the Consumer Affairs Agency in Japan has improved the situation with the formulation of a Guideline on Non-use Labeling of Food Additives.

Nonetheless, food packaging aside, misleading information is still being put out that MSG is something to avoid.

With the aim of dispelling these misconceptions, the Group actively uses social and other media to explain how MSG is produced and disseminates information about MSG based on scientific facts. Not only will we continue to resolve misunderstandings about safety, but we shall also engage in initiatives to spread information about the benefits of MSG to the world, including MSG's role in reducing salt intake and improving nutrition for the elderly.

> P039
> KnowMSG

Umami and MSG promotions in the United States

MSG has gained strong support on social media in recent years, especially among younger generations, where it is now seen as something cool. In light of this situation, some mega-influencers have emerged who use MSG as a buzzword to increase their social networking followers. The estimated U.S. MSG market has grown steadily since fiscal 2021.

Hispanic and Asian cuisines, which often feature MSG, have also grown in popularity among younger users online. We responded by sharing content focused on new uses for MSG, including in desserts and reduced-salt applications. As a result, more people began using MSG in experimental ways and posting about it on social media and generating increased media coverage in articles.

These trends drove impressions for U.S. online articles mentioning MSG in a positive or neutral tone to 80.6 billion in fiscal 2024, up 1.8 times year over year. Of such articles, earned media[1] impressions totaled 28.1 billion, an increase of 1.9 times. Meanwhile, the proportion of articles spreading negative or inaccurate information about MSG, including health risks, declined significantly compared with fiscal 2021.

[1] Media exposure a company or brand gains through third-party endorsements without directly paying for it.

Other communication activities

■ Japan

Ajinomoto Co., Inc. disseminates information utilizing science-based knowledge on food and amino acids to professionals working with food and in health. Our website Ajicollab provides information on "delicious salt reduction," which is a way of using umami seasoning to reduce salt in food but not to the detriment of the taste; information on increasing the amount of food consumed by senior citizens who are cutting back on their salt intake; nutrition education programs; reports from seminars at various academic conferences, and more.

For consumers, we declared our commitment to the Ministry of Health, Labour and Welfare's Strategic Initiative for a Healthy and Sustainable Food Environment in fiscal 2023. We also conducted initiatives targeting Generation Z to communicate the importance of reducing salt intake from a young age and share the value and techniques of "delicious salt reduction" using umami, delivered through the voices of cooking influencers. Furthermore, we held an event in fiscal 2024 for working adults in their late 20s who are beginning to focus on food and health. The event combined interviews on dietary habits and nutrition awareness with a tasting experience low-salt meals using AJI-NO-MOTO® umami seasonings. We then identified effective communication strategies to help younger generations take ownership of salt reduction based on the insights we gained through this event. These findings will support our efforts to improve public health going forward.
We also participated in the 9th Let's Use Umami Seasoning! Local Cuisine Contest, held in 2024 by the Umami Manufacturers Association of Japan, of which we are a member. Through this initiative, we contributed to the development of registered dietitians who can promote "delicious salt reduction" by effectively using umami seasonings. The 2024 Local Cuisine Contest also enabled our company to help pass down food culture and foster the well-being of people and society through shared meals.

> Ajicollab (Japanese only)

■ Nigeria

AJINOMOTO FOODS NIGERIA LTD. (AFN) implemented wide-ranging salt reduction and nutrition education initiatives as part of our commitment to public health and sustainable development. These initiatives are designed to empower individuals, promote healthier communities, and contribute to the well-being of all human beings, our society, and our planet with “AminoScience.”

Here are some of our key activities and their impact:

- We engaged with over 1,000 participants through stakeholder seminars and professional presentations, engaging food scientists, dietitians, and educators in discussions on salt reduction, MSG usage, and healthy diets. Post-event feedback showed a 100% shift in perception, with participants willing to recommend and use AJI-NO-MOTO® for safe, flavorful cooking.
- Our school outreach programs reached more than 3,000 students across 12 schools, instilling knowledge about balanced diets and portion control. Over 535 employees participated in wellness sessions in the workplace, resulting in an 80% more employees making healthy food choices.
- We amplified our message through media campaigns, reaching over 2.5 million TV viewers and 1 million radio listeners. National newspapers featured articles clarifying the safety of MSG, backed by scientific evidence, and its ability to enhance flavor while reducing sodium.
- We partnered with healthcare professionals and educated about 1,500 pregnant and breastfeeding mothers through workshops at six primary health centers. These sessions emphasized proper maternal nutrition and exclusive breastfeeding practices, highlighting the vital role of breastfeeding in infant nutrition.
- Our practical outreach efforts included live cooking demonstrations and caterers’ competitions, reaching millions and directly training over 300 people on nutritious, cost-effective meals using local ingredients. Our three regional contests engaged 450 food entrepreneurs, showcasing low-salt, MSG-enhanced recipes. These demonstrations were a valuable opportunity for both home cooks and small food vendors to enhance their culinary skills while prioritizing nutrition.

ANF continues to implement sustainable food practices and nutrition literacy across Nigeria through these multifaceted efforts, which earn the company notable recognition.

Addressing health issues

Making regenerative medicine[1] a reality

Commercial cell culture media[2] for regenerative medicine

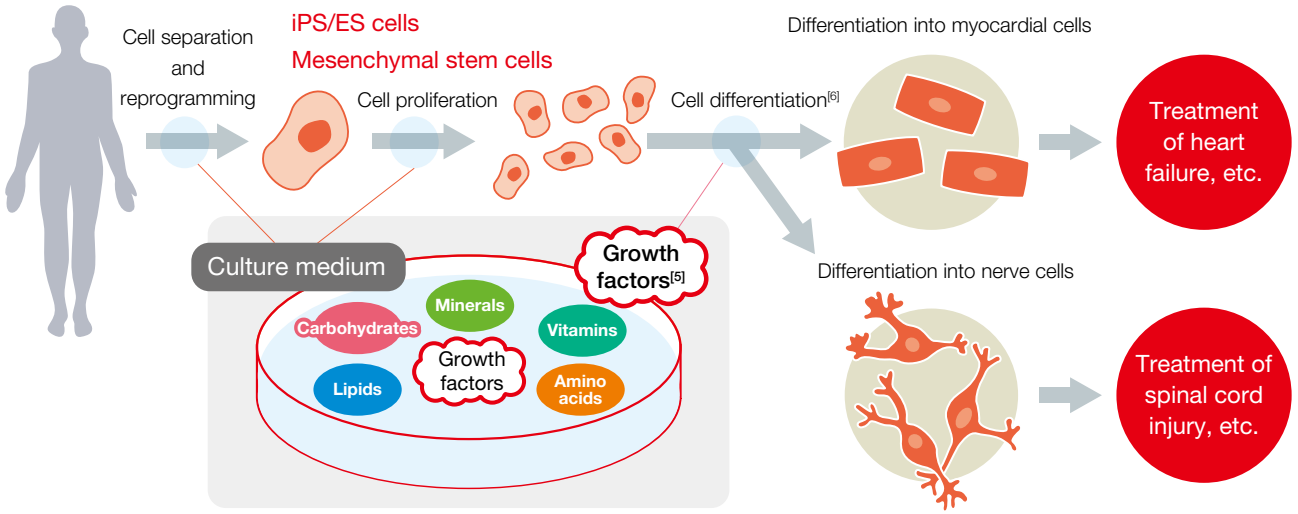
Results

Today, scientists around the world are researching regenerative medicine as a radical treatment for solving problems in organ transplantation. The Ajinomoto Group supplies pharmaceutical-grade amino acids, which are a key ingredient in cell culture media. In 2014, the Group developed an iPS[3]/ES[4] cell culture media free of animal-derived ingredients, and began launching related products beginning in 2016. At present, several academic institutions and pharmaceutical companies are conducting or preparing to conduct clinical trials for regenerative therapies using our StemFit® cell culture media. For example, in Japan, StemFit® cell culture media were also used in the clinical phase I/II trial using HS-001, a cardiac regenerative medicine using iPS cells developed by Heartseed, Inc., which completed dosing of its tenth patient in February 2025.

We also supply StemFit® to overseas markets. In April 2024, we launched upgraded cell culture media products for use as raw materials in manufacturing investigational drugs in North America and Europe in response to the increasing number of overseas companies advancing into clinical trial development.

We will enhance our presence in the field of regenerative medicine in Japan by utilizing our high-quality amino acids, expertise in amino acids, fermentation technology, formulation technology, and other advantages. We will also aim to expand our business in cell culture media for regenerative medicine in North America and other regions overseas, contributing to innovative treatments as quickly as possible.

Role of cell culture media in regenerative medicine



[1] Medical treatment of dysfunctional, non-functional or defective tissues. Artificially reproduced functional cells or tissues are transplanted to regenerate tissue and replicate function.
[2] A nutrient solution that contains a balanced mixture of amino acids, carbohydrates, lipids, vitamins, minerals and growth factors required for cell growth.
[3] Induced pluripotent stem cells generated from human body cells by adding several types of factors. These stem cells exhibit pluripotency (ability to differentiate into various tissues and organs) and an almost limitless capacity for proliferation.
[4] Embryonic stem cells created using inner cell mass from human blastocysts. These cells exhibit the ability to differentiate into various human tissues and organs.
[5] Proteins that promote the proliferation and differentiation of specific cells in human and animal bodies.
[6] The conversion of iPS/ES cells into cells of different tissues and organs that make up the body.

Accelerating growth of gene therapy

Results

In November 2023, the Ajinomoto Group made Forge Biologics (“Forge”), a U.S.-based gene therapy contract development and manufacturing organization (CDMO), a wholly owned subsidiary as part of efforts to evolve the Group business model in the healthcare field. We are now working to build a robust platform in advanced medical care by combining our respective strengths in technology development.

Forge Biologics

Forge is a gene therapy CDMO founded in 2020 that develops and manufactures gene therapy products. The company has manufacturing capabilities in two key areas of the value chain, AAV vector manufacturing and plasmid DNA manufacturing, and also employs experienced, specialized personnel. In addition to a track record of regulatory compliance through good manufacturing practice (GMP) manufacturing gene therapy drugs for clinical use, the company has a wealth of experience with dozens of customer programs.

Next-generation gene therapy

In our medium-term ASV initiatives 2030 Roadmap, the Ajinomoto Group has set four growth areas that leverage the strengths of “AminoScience,” one of which is the Healthcare area. In this area, in addition to steady growth in existing businesses such as amino acid and small molecule pharmaceutical CDMO, the Group expects accelerated growth from businesses such as oligo nucleotide/biopharmaceutical CDMO, regenerative medicine/antibody cell culture media, and medical food. On the other hand, we set gene therapy CDMOs as one of our next-generation strategic businesses as a stepping stone toward the growth of cutting-edge modalities from a longer-term perspective.

Genetic disorders are caused by faulty genes that prevent the body from producing proteins with the necessary functions. Gene therapy addresses these conditions by repairing or supplementing the genes within cells to correct the underlying genetic defects. Adeno-associated virus (AAV) vectors commonly serve as carriers (viral vectors) to introduce genes designed and manufactured to produce necessary proteins into target cells in the body. In AAV vector production, three types of plasmids are prepared and introduced into cultured production cells. The AAV vectors are then purified from the culture media.

Genetic therapy is primarily intended to treat hereditary diseases difficult to treat adequately with existing therapies. Once administered, the therapeutic gene remains inside the cells and continuously produces functional proteins, enabling a single treatment to provide long-term effects. Approximately 350 million patients currently suffer from over 10,000 forms of rare diseases worldwide, of which 80% are genetic.

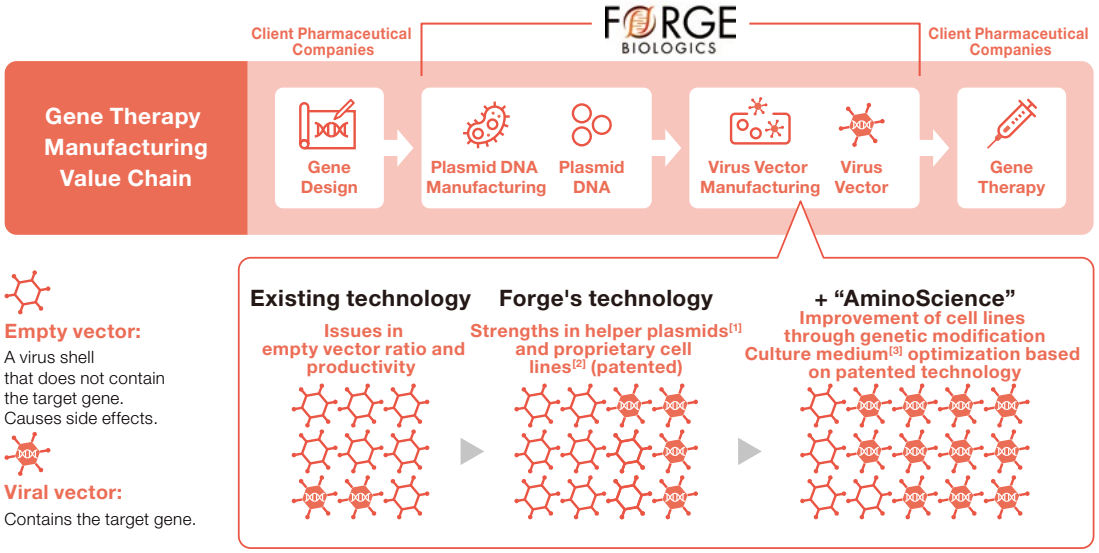
Furthermore, children account for 50% of the patients. Among gene therapies for these rare diseases, more than 100 clinical trials using AAV vectors are currently underway, primarily in the United States, and eight new drugs have already been approved. The CDMO market for gene therapy drugs is likely to expand due to an increase in the number of clinical trials and the resulting increase in the number of approved drugs. Pharmaceutical needs in gene therapy are also likely to continue growing. In addition, AAV vector and plasmid DNA manufacturing, which are key steps in the gene therapy manufacturing value chain, require advanced technical expertise and dedicated manufacturing facilities.

This is a market where the Ajinomoto Group can demonstrate clear technological differentiation, and where demand is expected to outpace supply for the foreseeable future. We aim to secure a unique and strong position in this field of gene therapy.

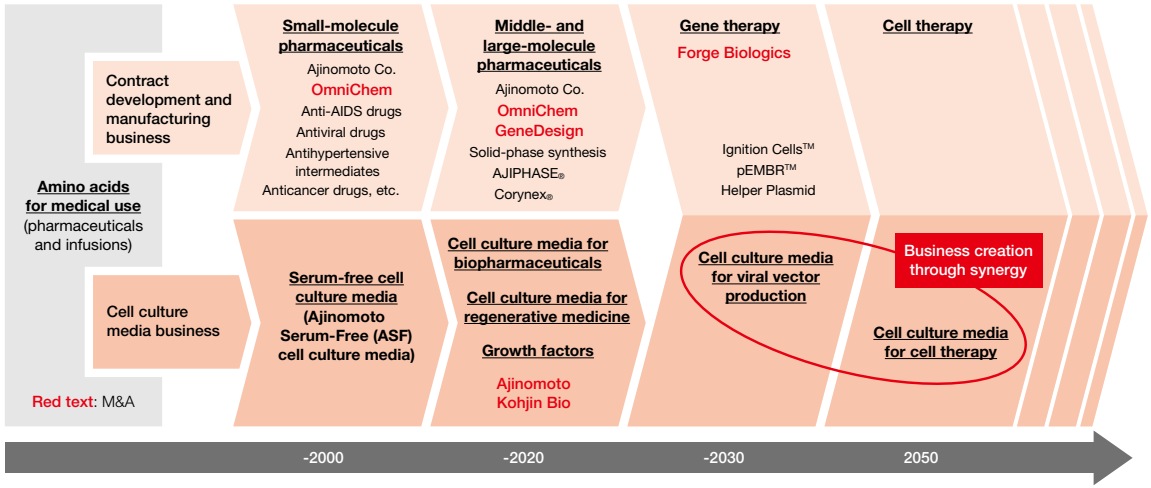
Building a strong platform through the evolution of "AminoScience"

Ajinomoto Co., Inc. and Forge jointly established an R&D synergy team to co-develop cell culture media optimized for Forge platform technologies and advance collaborative research and development in AAV manufacturing.

Forge is a gene therapy CDMO with manufacturing capabilities at two key points in the gene therapy manufacturing value chain: AAV production and plasmid DNA production. The company also has the technology to produce highly pure, high-yield AAV vectors. Forge has already produced products in accordance with GMP for the clinical trials of a number of biotech companies. By building up a solid manufacturing track record, the company has grown and expanded rapidly over the past few years and are expected to continue to grow in the future. Furthermore, Forge owns one of the world's largest manufacturing facilities capable of commercial production for rare diseases, including those with a large number of patients. The company also has expandable space within their facilities to accommodate further business expansion in the future.



[1] DNA of a protein which is required to encapsule a gene of interest into the virus shell.
[2] Special cells that are used to introduce the DNA (plasmid) of a gene of interest and a helper plasmid to produce a viral vector.
[3] Source of nutrients required to grow cells and produce a viral vector.

Establishing a value chain for cell therapy

Ajinomoto Co., Inc. possesses a strong technological foundation in the CDMO field, along with advanced formulation optimization and manufacturing expertise gained through years of cell culture media development. We generate significant synergies by combining these strengths with Forge expertise in AAV manufacturing and their proprietary platform technologies. The establishment of this global biopharmaceutical platform, which includes Forge, has enabled the Ajinomoto Group to manufacture consumables and raw materials essential to the cell therapy value chain, including cell culture media and viral vectors optimized for specific cell types. Building on this foundation, we will continue to generate synergies to strengthen and expand our business while advancing from gene therapy toward broader applications in cell therapy.