

Contribution to solve food and health issues

Since our founding, the Ajinomoto Group has aspired to fulfill the ambition of our founder to help people live healthier with nutritional, delicious foods that utilize umami, and we have been spreading this message across the world. The issues and needs related to food and nutrition in modern society are becoming more diverse and more complex. The Group aims to maximize our impact on nutrition through our businesses. To achieve this aim, we encourage people to eat a nutritionally balanced diet by sharing our expertise of amino acids. In this way, we contribute to the better health and dietary habits of people all over the world.

Specific examples

- Undernutrition and overnutrition (customer welfare)
- Nutrition for infants, young women, and seniors
- Well-being
- Regenerative medicine
- Preventive medicine

Related opportunities and risks (○ Opportunity ● Risk)

- Revised lifestyle habits, including diet and exercise, due to increasing seriousness and diversity of health issues
- Brand trust
- Stronger laws and rules related to health and nutrition (sugar tax, nutrition labeling)
- Involvement of food and nutrition in predictive prevention
- Development of regenerative medicine technology, antibody drugs, and oligonucleotide therapeutics
- Rising competition in the health and nutrition field

Key initiatives by the Ajinomoto Group

- Offering tasty food and amino acid products as well as menus that nourish health and well-being
- “Delicious salt reduction” (umami)
- Promoting protein intake
- “Delicious sugar and fat reduction”
- Workforce nutrition improvement
- Use of nutrient profiling systems for product development
- Customized proposals of products and services that are useful for improving nutrition (personalized nutrition)
- Contributing to preventive medicine through “AminoIndex technology”
- Cell culture medium for regenerative medicine
- Contract development and manufacturing of biopharmaceuticals

Related SDGs



KPIs of our nutrition commitment

	FY20	FY25 (Target)	FY30 (Target)
Percentage of products with high nutritional value ^[1]	31%	–	60%
Provision of products from among those with high nutritional value that are beneficial to “delicious salt reduction” and “protein intake”	280 million people annually	–	400 million people annually
Availability of products utilizing the physiological and nutritional functions of amino acids	(Base year)	–	2 times
Nutrition education for employees (Persons)	460	Cumulatively 100,000	–

[1] Products that meet the standards the Ajinomoto Group set based on global standards for nutrients used in major nutrient profiling systems

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Performance

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Quantifying salt reduction using umami

The Ajinomoto Group seeks to help extend the healthy life expectancy of one billion people by 2030. To this end, we are focusing on the excess intake of sodium as a health issue and setting our sights on achieving a “delicious salt reduction” using the flavoring function of umami. However, we had not quantitatively clarified the salt reduction effect achievable using umami.

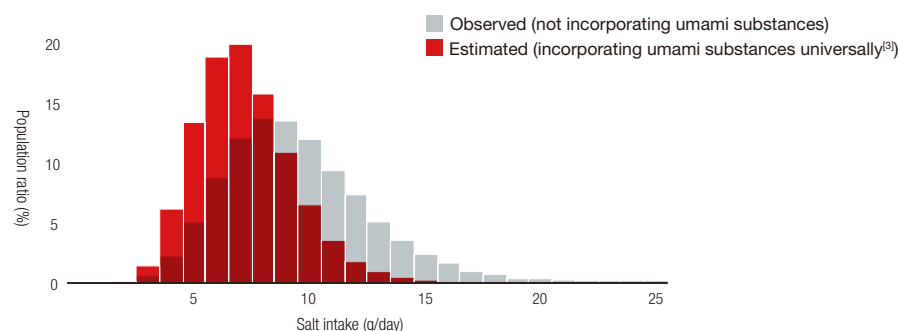
From August 2020, taking into account efforts^[1] by the World Health Organization (WHO), we are working with academia to verify umami’s effectiveness in salt reduction. As a first step, we set the rate of salt reduction achievable using umami for each food item normally consumed by Japanese people without compromising deliciousness, and from the average intake rate of the population we analyzed the effect of salt reduction at the country level. Results showed that the average salt intake per Japanese person can be reduced between 12% and 21% (1.3 g to 2.2 g/day) when incorporating umami into Japanese dietary patterns. Results of this study were published in the July 2021 preprint server for the medical journal. In the future, we plan to expand the scope of this analysis to cover the G20 countries.

Using the results of this project, we will move forward with joint research with academia using data from Japan’s National Nutrition Survey to estimate reduced DALYs^[2] by reducing salt. This will let us visualize the impact of salt reduction using umami, and communicate and promote this information to people involved in public health and nutrition as a scientific basis for extending healthy life expectancy.

[1] The WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases (NCDs) calls for reducing salt intake by 30% (over 2011 levels) by 2025.

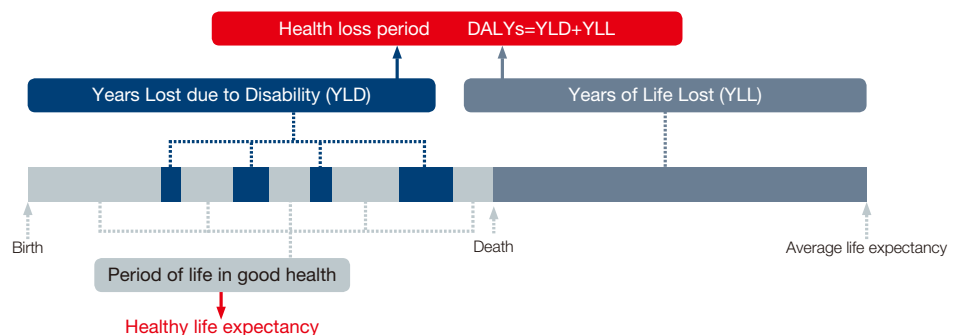
[2] DALY is the number of years of life a person might be expected to lose when adjusted for a disease or health condition and the severity of the disability. DALY is the sum of Years of Life Lost (YLLs) and Years Lost due to Disability (YLDs). Developed in the early 1990s by Harvard University Professor Christopher Murray, the DALY metric quantifies the overall burden of disease and health conditions. DALY is used by the WHO and the World Bank as an overall health outcome indicator that provides a different perspective than standard life expectancy, and is increasingly being used around the world as a complementary indicator to healthy life expectancy.

Estimated results of salt intake with use of umami



[3] In which 100% of foods containing sodium are replaced by reduced-salt foods using umami.

Relationship between healthy life expectancy and DALYs



Contribution to Solve Food and Health Issues

Amino acid functions and technical applications

Approach

- > Enhancing Life with Amino Acids
- > Examples of the Functions and Technological Applications of Amino Acids (Japanese Only)

The Ajinomoto Group business began in 1909 with the launch of umami seasoning *AJI-NO-MOTO*®. Dr. Kikunae Ikeda, a chemist, discovered a taste derived from traditional Japanese *kombu dashi* (kelp stock) that had yet to be recognized in the world. He succeeded in extracting the amino acid glutamate from the *kombu dashi* in 1908. Dr. Ikeda called this taste umami, inventing a method to produce umami seasonings made from glutamate that impart everyday umami and delicious tastes. Our founder, Saburosuke Suzuki II, received a request for commercialization from him and launched the seasoning as *AJI-NO-MOTO*® in 1909.

Since that time, we have worked diligently to evaluate and unlock the power of amino acids to discover how they can be used in different ways to improve society.

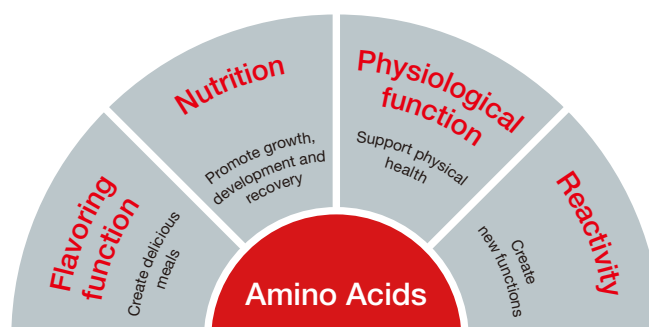
Approaches that utilize the functions of amino acids

About 20% of the human body is made of proteins. These proteins are made up of 20 different types of amino acids. Amino acids form nearly 100,000 kinds of proteins through various combinations.

Some amino acids are made in the body; however, there are nine amino acids, called essential amino acids, that can only be obtained through foods. Because amino acids provide important functions in maintaining life, humans must ingest a sufficient amount of amino acids in balance with other nutrients through daily diet.

Amino acids provide four functions: flavoring function, nutritional function, physiological function, and reactivity. The Ajinomoto Group uses the functions of amino acids and technologies (including design, exploration, production, and evaluation) to create a variety of innovations. We grow our businesses in foods and seasonings, as well as in healthcare and electronic materials, by combining functions of amino acids.

The four benefits of amino acids



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Performance

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Innovations utilizing the functions of amino acids

The Ajinomoto Group takes advantage of the functions of amino acids to provide solutions to a variety of social issues, including health, well-being, and sustainable foods for the future. We focus on solving nutritional issues through the use of amino acids, bringing innovations to the world with advanced technologies. Our highest priorities focus on offering “delicious salt reduction” and optimizing protein intake. In addition, we develop amino acid-based personal care ingredients that are safe and gentle on the skin and the environment by utilizing the functions of amino acids. We sell these products to cosmetics and toiletries manufacturers in Japan and overseas.

Proposing health and nutritional value based on scientific evidence

The Ajinomoto Group leverages our world-class expertise on amino acids to develop and sell products that support comfortable lifestyles. We also offer amino acid compounds and product design solutions for BtoB customers.

In May 2021, we launched *No-katsu Seven Amino* in Japan. This food with functional claims leverages the effects of the seven essential amino acids^[1] to maintain attention^[2] and retain cognitive flexibility, two cognitive functions that decline with age. This product also supports positive feelings^[3]. As Japan enters an era of a super-aging society, declining cognitive function in citizens will become a major social issue. The need for cognitive function support supplements based on scientific evidence is expected to increase.

In BtoBtoC business, by adding various amino acid functions to food, we help consumers easily ingest these compounds to experience the health and nutritional value of amino acids. We call this series of BtoBtoC initiatives our downstream strategy, which we pursue in Japan and overseas. Based on this strategy, we offer to our BtoB customers Amino Acid Prime Mix, a line of optimally formulated amino acid ingredients for food and beverage products.

[1] Leucine, phenylalanine, lysine (as hydrochloride), isoleucine, histidine (as hydrochloride), valine, tryptophan

[2] Ability to pay attention to more than one thing, ability to focus attention quickly on important things

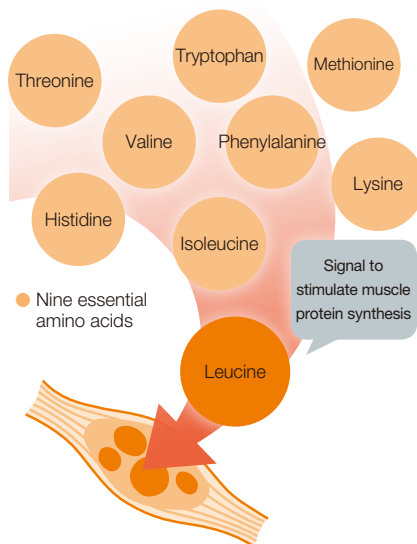
[3] Bright and pleasant mood, motivated, active, etc.

Contribution to Solve Food and Health Issues

Amino Acid Prime Mix ingredients

Essential amino acid mix with 40% leucine

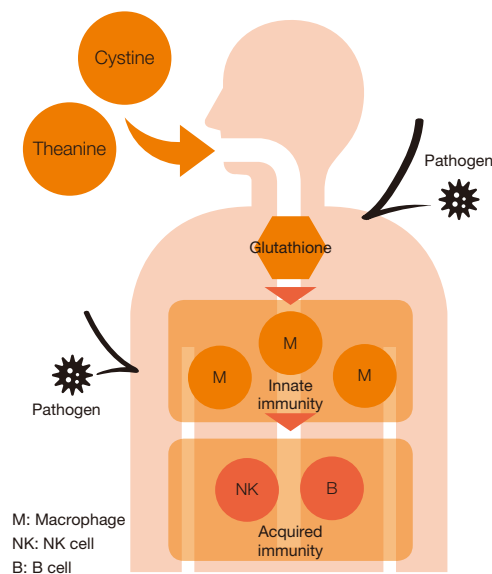
Function Maintains and improves muscle mass and strength



Of the nine amino acids, leucine works as a signal to stimulate muscle synthesis. This 40% leucine formulation supports efficient integration of essential amino acids in the body for enhanced muscle mass and strength.

Cystine and theanine^[1] mix

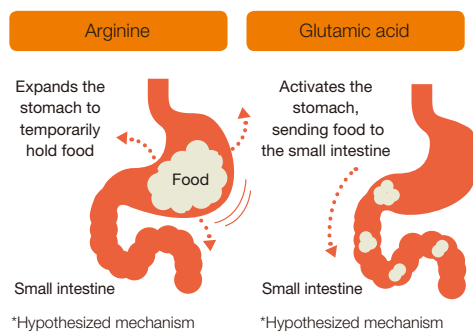
Function Enhances immunity



Cystine and theanine support the production of glutathione^[2], an antioxidant. Glutathione boosts one's ability to fight pathogens by helping to activate the innate and acquired immune systems.

Arginine and glutamate mix

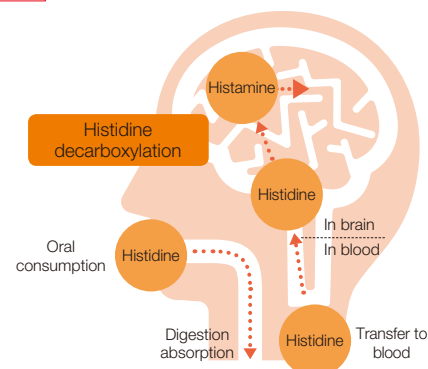
Function Improves gastric motility and appetite



Arginine and glutamate work to alleviate stomach discomfort from food and drink by promoting gastric motility.

Histidine and vitamin B6 mix

Function Alleviates fatigue, improves work efficiency



Histidine is used to make histamine, levels of which decline in the brain as a result of stress and sleep deprivation. Histidine alleviates fatigue and improves efficiency in tasks requiring simple memory and decision-making. Vitamin B6 aids histidine action.

[1] An amino acid found in tea leaves. A derivative of glutamic acid, theanine, when consumed, is broken down into glutamic acid and ethylamine in the body.

[2] An important antioxidant for many living organisms, glutathione is formed by joining three amino acids, glutamic acid, cysteine, and glycine, in that order. The amino acid cystine alone increases glutathione levels, but adding the glutamic acid derivative theanine increases glutathione levels even more significantly.

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Addressing nutritional issues

Approach

- > Decade of Action on Nutrition
- > Integrated Report 2021 P35-36
- > Nutrition and Health

Approach to nutrition

Health problems such as lifestyle-related diseases, undernutrition and overnutrition caused by aging, diet and lifestyle are increasing globally^[1]. A Double Burden of Malnutrition (combination mixture of the problems of undernutrition and overnutrition) is possible not only in a single country or region, but also in an individual. Improving the nutritional balance in our daily diets is important for solving problems such as the insufficient intake of proteins and vegetables or an excess intake of sugar, saturated fat, and salt.

In the 20-25 MTP, the Ajinomoto Group clearly states our intentions to improve the quality of life (QOL) of people around the world. We also stated our aspirations to assist people in maintaining delicious and well-balanced diets by addressing nutritional issues through our core activities of contributing towards solving food and health issues. As a global food company involved intimately in daily eating habits, we pursue initiatives based on a policy of Nutrition Without Compromise, meaning no compromise in terms of taste, access to nutritious foods, and local way of life. Aimed at extending the healthy life expectancy of one billion people by 2030, in 2021, we formulated a commitment outlining paths and KPIs to improve people's nutrition. Moving forward, we will continue to promote activities for improving nutrition while closely monitoring the progress of this commitment.

[1] UN: Decade of Action on Nutrition

Nutrition Commitment

By 2030, we will help extend the healthy life expectancy of one billion people by increasing the current reach to 700 million consumers and providing products and information that support consumers in enjoying nutritious and delicious food with Nutrition Without Compromise as basic policy on our approach to nutrition.

■ Support practice of "delicious salt reduction" using umami

- We will leverage our current reach to 700 million consumers to raise general awareness of salt reduction using umami, and support more people to achieve salt reduction without compromising taste.

■ Provide nutritious products to contribute to people's wellness

- By fiscal 2030, 60% of our products will have high nutritional value while maintaining good taste. We will use the Ajinomoto Group Nutrient Profiling System (ANPS) to guide product development and reformulation.
- Among the nutritious products, we will provide products that promote "delicious salt reduction" and "protein intake optimization" to 400 million people a year by fiscal 2030.
- By utilizing the physiological and nutritional functions of amino acids, by fiscal 2030, we will double the availability of such products that contribute to health, compared to fiscal 2020.

■ Support consciousness/behavior change of consumers by providing information that supports health and nutrition improvement

- We will provide consumers with information to help them improve their health and nutrition, as well as easy recipes and menus both on product packaging and on our website that support delicious and well-balanced meals and healthy lifestyles.

■ Improve nutrition literacy of Group employees

- We will help our employees improve and maintain their health by providing healthy meals in the workplace, nutrition education, health checkups and maternity leave.
- By fiscal 2025, we will provide nutrition education to sum total of 100,000 employees.

Contribution to Solve Food and Health Issues

■ The three pillars of our approach to Nutrition Without Compromise

• Without compromising taste

The Ajinomoto Group continues to develop and sell healthier products (reduced salt, etc.), and we do so without compromising on the taste consumers enjoy. By providing seasonings such as umami seasoning (MSG), we help consumers cook delicious and healthier meals while contributing to reduced salt in our customer's products.



Umami seasoning AJI-NO-MOTO®

• Without compromising access ~delivering nutrition to all people~

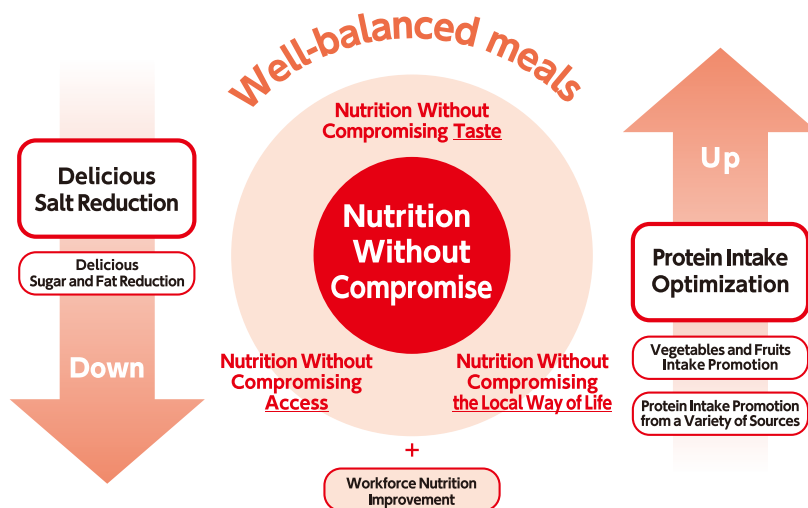
While many people in the world have various means to access nutrition (or nourishment), we recognize that some people have limited choices in terms of the products they can access due to availability, affordability, or convenience. We believe that we are in a distinct position to make nutritious meals more accessible for all through innovations that utilize the unlocking power of amino acids, products and ingredients as well as through our efforts on distribution, price, and convenience.

• Without compromising the local way of life

The Ajinomoto Group is a global company, but we operate in local markets where there are established approaches to culture, traditions, and enjoying food. When expanding our businesses globally, we adapt our operating models to respect the local customs, food preferences, resources, ingredients, and stakeholders. Further, as communities and economies develop and change, our emphasis on personalization becomes even more relevant.

When nutritious foods taste good, are convenient and easily accessible, and respect local customs and flavors, we are able to promote the long-term intake of well-balanced meals by consumers.

Ajinomoto Group approach to nutrition



Refer to P27 to 35 for details of initiatives to make the above approaches a reality.

Contribution to Solve Food and Health Issues

Framework

> Group Shared Policy on Nutrition
> P3

Performance

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Performance

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Framework for nutrition management

We are enhancing our nutrition-focused initiatives based on the Group Shared Policy on Nutrition and the related Ajinomoto Group Nutrition Strategy Guideline. Under the Executive Officer in charge of sustainability, the Sustainability Development Dept. formulates policies and strategies related to nutrition, follows up on the activities of business departments, compiles information, and reports to the Executive Committee and the Board of Directors.

Use of nutritional profiling systems for product development

The Ajinomoto Group has set a goal for fiscal 2030 of increasing to 60% of our products that offer high nutritional value^[1] while maintaining good taste. In fiscal 2020, our performance was 31%. We became the first Japanese company to start use of nutrient profiling system as a base for visualizing health ratings of products and making continuous improvements. As of March 2021, approximately 500 products from nine of our group companies in seven countries, including Japan, are evaluated using our own nutrient profiling system ANPS.

The ANPS-P (for Product) conforms to the score calculation method applied by the Health Star Rating System, a nutrient profiling system used in Australia and New Zealand. In this system, the nutritional value of a product is rated based on the quantity of nutrients they include for which excess intake is to be avoided (calories, added sugars^[2], sodium, saturated fats^[3]) and that are recommended but often lacking (proteins, vegetables, fruits, nuts, beans, fiber).

Aiming at providing integrated support for nutritionally balanced meals, we are also developing a nutrient profiling system for meals made with the Group's products. We plan to apply the system to products that require additional ingredients other than water (such as seasonings, soups, and some packaged food products), while also using the system to create recipes displayed on product packaging.

[1] Products that meet the standards we set based on global standards for nutrient profiling systems.

[2] Total of five types of sugars contained in products (sucrose, glucose, fructose, lactose, and maltose).

[3] A fatty acid contained mainly in animal fat.

Initiatives to achieve our approach to nutrition

■ “Delicious salt reduction”




Risks due to excess salt intake are becoming more serious worldwide. Despite WHO initiatives^[4] warning against such risks, improvements have yet to be seen. The Ajinomoto Group encourages sodium reduction through our unique technologies (e.g., providing deliciousness using umami, improved taste using materials such as umami seasonings and MSG along with formulation technology, improved material properties by using enzyme technologies, etc.). In addition to providing products with reduced sodium, we are also actively creating low-sodium content and menus available via websites and social media.

Further, through collaboration with academia and governments, we share our expertise regarding methods to reduce salt while maintaining deliciousness, and conduct activities to clarify the efficacy of salt reduction using umami and MSG. We plan to widely publicize our findings and create a regional ecosystem to accelerate social implementation of “delicious salt reduction.”

[4] The Global Action Plan for the Prevention and Control of Noncommunicable Diseases (NCDs) states a goal to reduce sodium intake by 30% (over 2011 levels) by 2025, and in May 2021, also announced benchmarks for sodium content in each food category.

Contribution to Solve Food and Health Issues

Main products

Japan				Asia	
					
Salt	Flavor seasonings	Soups	Frozen foods	Flavor seasonings	
North America		South America		EMEA ^[1]	
					
Frozen foods		Flavor seasonings		Flavor seasonings	Soups

[1] Europe, the Middle East and Africa

Smart Salt initiatives

Japanese food is known around the world for being healthy, but the fact remains that it contains a lot of salt. More than 80% of Japanese consume more than the recommended amount of salt per day^[2]. In Japan's Ministry of Health, Labor and Welfare's Dietary Reference Intakes for Japanese (2020 edition), the standards for daily per-person consumption of salt were lowered by 0.5 g to no more than 7.5 g for males and 6.5 g for females.

A survey^[3] conducted by Ajinomoto Co., Inc. revealed that only 5.2% of Japanese adhered to these standards. In order to solve concerns that many consumers may have about reductions in salt (lack of deliciousness, difficult, etc.), in July 2020 we launched the Smart Salt Project that promotes the use of umami and *dashi* (broth) to achieve "delicious salt reduction." In this project, we provide suggestions about "delicious salt reduction" using umami and other flavor seasonings through videos on our owned media and recipes on dedicated websites, and plan new initiatives towards salt reductions through collaboration with other companies.



We have similar activities underway overseas as well, and in fiscal 2020-2021, in addition to introducing eight brands of 22 reduced-salt products in five countries, we will also promote low-sodium diet in each Group companies' owned media by providing low-sodium recipes and holding cooking classes.

[2] Estimate by Japan's Ministry of Health, Labor and Welfare's National Health and Nutrition Survey calculated from salt consumption amongst 20-year olds and up (2019)

[3] Ajinomoto Co., Inc. Smart Salt ~2020 Survey on Reducing Salt~

Constructing an ecosystem to solve food and health issues that vary between regions

The Ajinomoto Group is working in conjunction with local governments, distributors, media, and dietetic associations to solve issues with diet and health that vary between regions, such as excess intake of salt and insufficient intake of vegetables. In reducing salt intake, since 2014 the Group has been partnering with local government and retailers in Iwate Prefecture, which at that time had the stigma of highest salt intake per capita of any prefecture in Japan. We conducted in-store promotions of reduced-sodium menus using local ingredients and our reduced-salt seasonings, and seminars aimed at dietitians on the subject of sodium reduction using umami seasoning. Through this program we contributed to lower the salt intake in Iwate Prefecture^[4]. In other prefectures as well, we are actively participating in health promotion projects centered on salt reduction promoted by each local government to deepen regional cooperation.

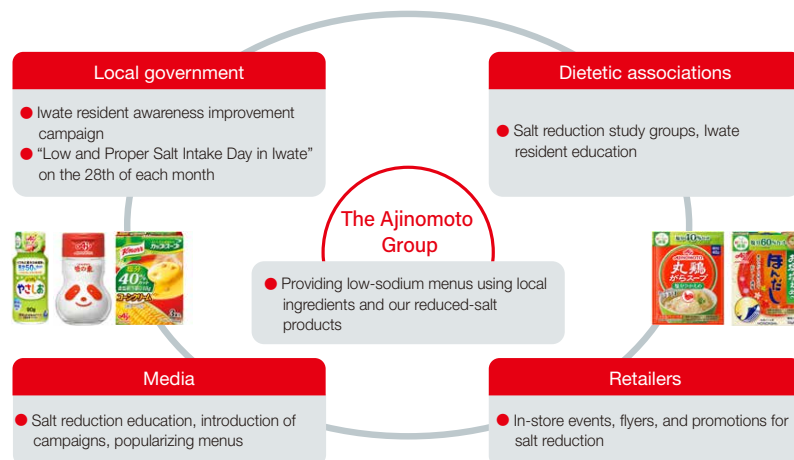
[4] In Iwate Prefecture, per-person daily salt consumption was 12.9 g for males and 11.1 g for females (both worst in Japan), but this had improved to 10.7 g (ranked 21st in Japan) and 9.3 g (ranked 18th in Japan), respectively.

> Integrated Report
2021 P56

> Smart Salt Project
(Japanese only)

Contribution to Solve Food and Health Issues

Ecosystem for salt reduction in Iwate Prefecture



Protein intake optimization

Insufficient dietary protein and lack of access to high-quality protein are issues of modern society. According to the WHO, about 20% of elderly people in particular worldwide do not have sufficient intake of essential nutrients such as protein that are needed to maintain and increase muscle mass and strength. Such undernourishment is recognized as an issue preventing healthy, long lives. The Ajinomoto Group strives to improve protein intake by providing seasonings which enhance the flavor of protein-rich meals as well as amino acids to supplement low-quality protein sources. We are also working to provide information such as recipes and menus through websites and social media (including proposals for hospitals and nursing care facilities).

Main products

Japan				
Seasonings for meat	Menu-specific seasonings	Soups	Frozen foods	Amino acid supplements
Asia		North America		
Menu-specific seasonings		Medical foods	Amino acid supplements	Frozen foods
South America		EMEA		
Flavor seasonings	Amino acid supplements	Medical foods	Frozen foods	

Dealing with nutritional issues in the elderly (Japan, Europe)

Elderly people may not be able to eat adequately due to declining physical functions and loss of appetite as they age. Less food intake causes body weight to decrease and muscular and physical strength to deteriorate, which may then lead to lower physical activity, less appetite, and a vicious cycle of undernourishment.

To prevent this, Ajinomoto Co., Inc. leverages its protein and amino acid nutrition expertise and strives to publicly disseminate nutritional knowledge to people with health problems. In addition, we

Performance

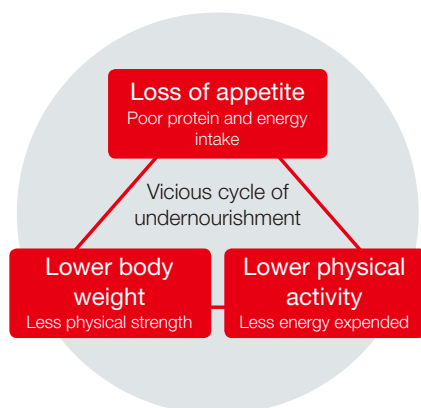
GRI203-2

> *Tabesapo* to eat well to prevent malnutrition (Japanese only)

Contribution to Solve Food and Health Issues

continue to partner with specialists, providing information for immediate use to healthcare providers, registered dietitians and pharmacists as guidance tools, and conducting training to foster deeper understanding. Our website for restaurant-use products now features a page entitled *Tabesapo* to eat well and prevent malnutrition. This webpage provides suggestions on tasty and easy-to-eat meals designed to maintain good health and reflect the physical changes unique to elderly people. We aim to support their nutritional intake by introducing techniques that make eating easier, as well as menu suggestions that utilize our products and cooking methods for each ingredient.

Vicious cycle of undernourishment



Three keys to prevent undernourishment



In December 2020, we acquired Irish supplement company Nualtra Limited through our consolidated subsidiary Ajinomoto Cambrooke, Inc. Nualtra Limited has developed oral nutritional supplements (ONS), a type of high-energy, high-protein medical food targeting elderly people with dietary restrictions due to illness or who are suffering from aging-related nutritional deficiencies, and markets these in the UK and Ireland. By applying the accumulated knowledge of *Deliciousness Technologies*® and the physiological functions of amino acids to Nualtra Limited's ONS business, we will solve issues with existing ONS products that include consumer dissatisfaction with taste, variety, and price, thus improving users' QOL.

■ Simple and delicious traditional tempeh menu (Indonesia)

With an increase in health-awareness given the spread of COVID-19, tempeh, a traditional Indonesian food made from fermented soybeans has become an important source of protein especially for people with lower incomes who have seen their household income drop.

In January 2021, PT AJINOMOTO INDONESIA released a new variety for its menu-specific seasoning *Sajiku*® which enables affordable and tasty preparation of frequently prepared tofu and tempeh goreng (deep-fried tofu and tempeh). Through this product, we are conveying a message of "keeping in touche with delicious nutritious meals" to Indonesian households.

■ Delicious sugar and fat reduction

Issues such as excess intake of sugar and fat are gaining attention in the global debate on health. 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.

Main products

Japan	Asia	South America
 Powdered beverages	 Canned coffee	 Powdered juice
 Sweeteners		
 Seasonings		

Performance

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Performance

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■ Sugar reduction

The Ajinomoto Group has utilized its amino acid production technologies in the use of two amino acid sweeteners, aspartame and advantame, which are roughly 200 and between 20,000 to 40,000 times sweeter than sugar, respectively. The selective use of high-intensity sweeteners can meet consumer sugar-reduction needs without sacrificing the taste of sweetness, and we provide these sweetness applications to businesses across the food and beverage industry. We also market products developed to support sugar reduction and appropriate sugar intake. These products include *Pal Sweet*®, a smooth-tasting low-calorie sweetener with zero sugar, *PAL SWEET DIET*® for BtoB sales that enhances the taste of food with natural sweetness, and *Refresco FIT*, a powdered juice that uses aspartame and is sold in Brazil.

In fiscal 2020, the Group launched two varieties of *Birdy*® canned coffee in Thailand. These products have 50% less sugar than the conventional product. In order to maintain the taste quality while reducing the sugar content, we selected and applied appropriate technologies inside and outside the company, thereby achieving both sugar reduction and deliciousness. We also launched a sugarless product, and by creating new options in the new low- and no-sugar segment of Thailand's coffee market are giving more choice to consumers. In the United States, we have released a stevia sweetener *AJISWEET*™ RA for BtoB customers.





■ Fat reduction

The Ajinomoto Group has identified a substance that imparts a rich taste and deep flavor to cooking. We call the function of this substance, "kokumi." We are increasingly finding that kokumi serves to compensate for the sensation of fat in foods. Utilizing this function, the Group developed and markets *Pure Select*® *Koku Uma*® mayonnaise. This product has the same rich taste as regular mayonnaise (due to a proprietary manufacturing method) and 65% fewer calories (compared to the Group's regular mayonnaise). We have also developed and marketed a low-fat *Marim*® creaming powder with 50% less fat.

■ Vegetables and fruits intake promotion

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

Main products

Japan		
		
Menu-specific seasonings	Consommé soup stocks	Soups
Asia	North America	EMEA
		
Flavor seasonings	Frozen foods (fried noodles with vegetables)	Frozen foods (gyoza with vegetables)

Contribution to Solve Food and Health Issues

> Love Vege
Enjoy delicious
vegetables
(Japanese only)

Performance

GRI203-2
> Press release

■ Vegetable intake promotion *Love Vege* project (Japan)

In Japan, we are promoting the *Love Vege* project as a way to support the recommendation by the Ministry of Health, Labor and Welfare to consume at least 350 g of vegetables per day. This was started in order to improve the situation in Aichi Prefecture, which had the lowest consumption of vegetables per person in the country. In cooperation with industry, government, and academia, we are carrying out recipe contests by students studying nutrition, launching collaborative promotion products with cut vegetable producers, and making recipe proposals with supermarkets in their stores. In fiscal 2020, in collaboration with industry, government, private and academia, we have spread out activities to encourage the younger generation through website and social media to appreciate and enjoy eating vegetables and to eat more of them in 37 prefectures. In recognition of these initiatives to resolve regional food and health issues, including *Love Vege*, Ajinomoto Co., Inc. received the Consumer Affairs Agency Commissioner’s Award (Special Category) for “Coexistence with Community” in the 2020 Consumer-Oriented Business Excellence Awards held by the Consumer Affairs Agency. We will further expand our *Love Vege* activities and work towards solving nutritional issues in communities.

■ Protein intake promotion from a variety of sources

To pass on a rich global environment to the next generation, the Ajinomoto Group is undertaking initiatives to boost the intake of sustainable and diverse proteins. Plant-derived proteins in general often have a poor amino acid balance and a lower nutritional value than animal-derived proteins. We believe that fortifying the deficient amino acids can increase nutritional value in plant-based proteins and contribute to improved protein intake. In addition to developing our own products, we also provide BtoB customers with solutions that improve the taste, flavor, and texture of plant-derived meat alternatives, and collaborate with startups in developing plant-based meats.

Ajinomoto Co., Inc. has acquired exclusive sales rights in Japan for high-protein^[1], high-nutritional-value Mankai plant (*wolffia*) owned by Hinoman Ltd. of Israel. This is a vegetable with a better balance of amino acids and it also offers excellent nutritional value, including vitamins, minerals, unsaturated fatty acids such as omega-3 fatty acids, and dietary fiber. Since this plant can be cultivated using small amounts of water, light, and nutrients, it can be produced efficiently in only a short period of time with low levels of environmental impact.

In July 2021, we released the *Mankai*® vegetable drink made with the Mankai plant.

[1] Approximately 45% of the nutritional components of Mankai (dry powder) are proteins.

Main products

Japan		EMEA
		
Bean soup	Powdered drink using Mankai plant	Bean soup

■ Proposals for bean and vegetable nutrition intake (Japan)

In Japan there is an increase in consumers, in particular amongst females in their 50s and 60s, who are actively trying to increase their protein and dietary fiber intake by eating beans and vegetables (from Ajinomoto Co., Inc. survey). However, as children become more independent, there are fewer opportunities to sit around the dinner table as a family. This leads to less variety in menus, and a disrupted nutritional balance.

In August 2020, Ajinomoto Co., Inc. released *Knorr*® *Potage with Beans and Vegetables* as a menu item that fulfills the role of a side dish and soup. This can be easily added to a meal simply by heating in a microwave while in the pouch. The ingredients provide protein and dietary fiber, helping consumers enjoy a healthy diet.

Contribution to Solve Food and Health Issues

Performance

GRI203-2
GRI403-5
GRI403-6

Workforce nutrition improvement

The Ajinomoto Group believes that employee health is one of our most important foundations. We are focused on improving workforce nutrition as well as employee nutrition literacy. From fiscal 2020, we have started initiatives to increase nutrition literacy amongst employees. We are creating materials on the basics of nutrition, and holding study sessions. By fiscal 2025, we aim to have provided education in nutrition to sum total of 100,000 employees.

Initiatives to improve nutritional literacy

FY2020	<ul style="list-style-type: none">Created nutrition literacy educational content by cross-departmental project membersHeld study sessions for the Company's 460 employees working at domestic sales departments
FY2021	<ul style="list-style-type: none">Hold e-learning "Nutrition Basics" for the Company's employeesExpand to 30 Group companies within Japan and overseasCreate advanced content and new content focusing on priority initiatives
- FY2025	<ul style="list-style-type: none">Archive educational materials

Initiatives to improve nutrition in Group company workplaces

Ajinomoto Health & Nutrition North America, Inc. has an established wellness program focused around five pillars: Nutrition and Fitness, Emotional, Financial, Community, and Work-Life Balance. The company is implementing a higher focus around nutrition education and opportunities to its employees such as seminars, education materials, providing fresh fruit and other healthy foods in workplaces, and promoting healthier lifestyles for employees.

AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. also provides a range of programs to support employee health. As well as providing nutritionally balanced menus in the company cafeteria, and holding workplace seminars on stretching, exercise, and nutrition, and cooking classes, the company has put in place a health support plan in partnership with a health insurance company that provides daily consultations by phone or app. Further, the company motivates employees with a commendation system for physical and mental health as well as healthy dietary habits.

At Ajinomoto Co., Inc., our initiatives include providing a nutritionally balanced menu in the employee cafeteria and having nursing rooms at our worksites.

Alliance for employee nutritional education

Ajinomoto Co., Inc. is carrying out a dialog with the Workforce Nutrition Alliance (WNA), which was launched by the Consumer Goods Forum (CGF), an international industry group for consumer goods, and the Global Alliance for Improved Nutrition (GAIN), an international NGO working to improve nutrition. WNA aims to have more than three million employees, including those at participating organizations and supply chains, to have access to and knowledge of healthy and safe meals and nutrition by 2025, and is focusing its activities on the four pillars of healthy food at work, nutrition education, nutrition health checks, and breast-feeding support. Looking forward, the Company plans to reflect these four pillars in our employee nutrition education.

Contribution to Solve Food and Health Issues

Performance

GRI203-2

Well-balanced meals

Since our founding, the Ajinomoto Group has contributed to the well-being of people by unlocking the power of amino acids to promote well-balanced meals that are full of flavor but also offer nutritional value.

We promote well-balanced meals with the precondition that they match the dietary habits and food preferences of each country and region. We also value a comprehensive approach to health, such as providing nutrition that meets the diverse lifestyle and the diverse value required for food, and providing nutritious meals at schools and hospitals.

■ Support to address the double burden of malnutrition (the Philippines)

The Philippines faces challenges of both under- and over-nutrition, resulting in underweight and obesity. These challenges are likely due in part to a nutritional balance leaning heavily toward carbohydrates. In response to these challenges, the Philippine government, in collaboration with the WHO and other parties, developed the *Pinggang Pinoy*[®] dietary guide to help consumers develop healthy eating habits. Since fiscal 2018, AJINOMOTO PHILIPPINES CORPORATION has been implementing “Mag-Pinggang Pinoy[®] Tayo!” (MPPT) program with government agencies to help promote and implement *Pinggang Pinoy*[®]. Since then, the company has provided solution using its products and services to make consumption of safe and balanced food, delicious and enjoyable to thousands of Filipino households.

In fiscal 2021, the company is conducting intervention study on the effect of MPPT program to improve children’s nutrition with the Institute of Human Nutrition and Food, College of Human Ecology, University of the Philippines Los Baños (UPLB-IHNF) and the local government of Cainta, Rizal. We aim to acquire evidence and to expand the MPPT program to other communities.



■ Addressing maternal and child nutrition (Vietnam)

In Vietnam, there is limited knowledge for nutritional needs of pregnant women, lactating women and young children, and there are nutritional issues for the mothers and children. In December 2020, AJINOMOTO VIETNAM CO., LTD. launched the Mothers & Children Project with the Ministry of Health of Vietnam. As a part of the project, the company developed software that contains more than 1,300 menus developed based on the nutritional standards of the National Institute of Nutrition. We provided the software through factory tours, nationwide medical facilities and Women Association. It is also equipped with functions such as a dietary habit check tool. We will also conduct online training and continue to support the improvement of maternal and child nutrition in Vietnam.

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

In Vietnam, many children suffer from stunted growth and low body weight, especially in rural areas. At the same time, a growing number of children in urban areas are overweight and obese. To resolve these issues, AJINOMOTO VIETNAM CO., LTD. launched the School Meal Project in 2012 to apply ideas learned from Japan’s school lunch system. Working with central government ministries, including the Ministry of Education and Training, and the Ministry of Health, the company has been carrying out a range of activities to deploy well-balanced school meals nationwide. The project has developed and provided school-meal menu books and food and nutrition education materials, and is developing and implementing menu-making software. As of March 2021, school lunch project activities have expanded across 62 municipalities and 4,262 elementary schools.

Contribution to Solve Food and Health Issues

Performance

GRI203-2

In Indonesia, the high percentage of children with low body weight, stunted growth and anemia is a serious social problem. PT AJINOMOTO INDONESIA implemented a school meal project in partnership with the Department of Nutrition at Bogor Agricultural University beginning in fiscal 2018. The ten-month program provides nutritionally balanced school lunches and teaches diet and nutrition to teenage students, and has led to lifestyle changes, and improvements anemic conditions of the students. In fiscal 2020, the company created a guidance book to promote the voluntary introduction of this program with the aim of expanding the number of schools that implement the program. We will continue and expand the program after 2021 through new collaboration with the Ministry of Religion.

■ Addressing nutritional issues in infants and toddlers (Ghana)

The Ajinomoto Group helps eliminate malnutrition in weaning-aged children in the Republic of Ghana through donations to the Ajinomoto Foundation's Ghana Nutrition Improvement Project.

Other initiatives (micronutrients)

The Ajinomoto Group is focused on optimizing the quality and quantity of nutrients in individual products and menus to improve nutrition. To accomplish this goal, we must supply the necessary nutrients.

In May 2020, we launched the nutritional supplement *Multivitamin & Minerals* in Japan. This product contains 12 vitamins and nine minerals essential for maintaining daily health, and is designed to supplement nutrients that individuals tend to lack due to an unbalanced lifestyle and diet. In July that year, we launched our *Blueberry & Lutein* food with functional claims. By containing bilberry-sourced anthocyanin which helps relieve eye strain, blended with lutein that improves contrast sensitivity, the product helps with keeping the eye moist, and improve its ability to focus.

Main products

<p>Japan</p> <div>   </div> <p>Creaming powder (vitamins and calcium)</p> <p>Supplements (lutein, etc.)</p>	<p>Asia</p> <div>   </div> <p>Supplements (vitamins and minerals)</p> <p>Pancake mix (calcium and zinc)</p>
<p>North America</p> <div>  </div> <p>Medical foods (for patients with amino acid metabolism disorders, etc.)</p>	<p>South America</p> <div>  </div> <p>Powdered beverages (iron, calcium, vitamins)</p>

Performance

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Initiatives to resolve nutritional issues

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 help solve nutritional issues through global collaboration and by actively sharing our knowledge and expertise.

Contribution to Solve Food and Health Issues

> UN Food Systems Summit

■ Towards the UN Food Systems Summit 2021

The UN Food Systems Summit (FSS) was held in September 2021. This is an international summit held by the United Nations based around the idea that a shift to sustainable food systems is essential to achieve SDGs. CEO Consultation (C-FSS), a preparatory meeting at which top management from companies in various industries advise the UN on methods of production, procurement, evaluation, and consumption of food around the world as well as issues facing and ideal circumstances for food systems, has been held a total of five times since 2020, with 40 to 50 companies participating. The Ajinomoto Group is the only Japanese company to have participated from the first of these meetings, during which, Takaaki Nishii, the President & CEO of Ajinomoto Co., Inc. has communicated the message that we aim to realize our approach to nutrition based on a policy of Nutrition Without Compromise. In July 2021, we also participated in the pre-summit and Nishii expressed a determination to achieve zero hunger and introduced our initiatives to improve nutrition.



> Tokyo N4G Summit

■ Collaboration with stakeholders ahead of the Tokyo N4G Summit 2021

The Tokyo Nutrition for Growth (N4G) Summit is scheduled for December 2021. The N4G summit was first held in 2013 following the London Olympics, and has since been held in Rio de Janeiro and now it will take place in Tokyo. Here, diverse stakeholders review the current situation and issues regarding improving nutrition around the world, and discuss international initiatives towards resolving these issues. The Ajinomoto Group was the only Japanese company to participate in the first summit meeting, and based on this experience, will demonstrate our commitment on improving nutrition at the upcoming summit meeting.



We also participate in the Nutrition Japan Public Private Platform (NJPPP), a platform for promoting businesses that improve nutrition through tie-ups between Japanese companies and academia, among other players. Together with NJPPP members, we plan to demonstrate the approaches to improving nutrition that are uniquely Japanese at the Tokyo N4G Summit. Additionally, together with other NJPPP members, we will actively make recommendations in response to the commitment set to be made by the Japanese government at the meeting.

Our sponsorship of nutrition improvement activities and support for academic meetings is also ongoing. Supporting Springer Nature, a world leader in scientific book publishing, we are planning academic events and providing support for scientific discussions for the Tokyo N4G Summit. In addition, we support the American Society for Nutrition, the Association for Chemoreception Sciences, and the Japanese Society of Nutrition and Dietetics and contribute to the development of young researchers. We also provide support for activities of academia related to deliciousness and nutrition.

> Building better food systems for nutrition and health

> Nature Outlook sustainable nutrition

■ Presenting at CGF-Japan Day

In May 2021, ahead of the major global conferences on nutrition the Consumer Goods Forum-Japan Day 2021 was held to learn about global perspectives and carry out more in-depth discussions into Japan's perspectives and contributions. In the Japanese Contributions to Nutrition Improvements session, President and CEO of Ajinomoto Co., Inc., Takaaki Nishii, took the podium to explain the Group's strategy on nutrition, using Japan's *Kachimeshi*®, and *AminoIndex*®, and personal care, Vietnam's school meal project, and the United States' Umami Project as case examples. In the panel discussions, he outlined the Group's unique initiatives to promote our nutritional literacy improvement initiatives to all employees.

■ Presenting at 2nd Global Summit on Enhanced Nutrition

In March 2021, a summit was held to point out the importance of public-private collaboration to develop, produce, and promote micronutrient-fortified foods, as well as opportunities for fresh initiatives as we approach FSS and the Tokyo N4G Summit. Chika Morishima, Executive Officer of Ajinomoto Co., Inc., participated in the summit, and introduced the Ajinomoto Group's contribution to solving global nutrition issues by unlocking the power of amino acids, as well as examples of our initiatives in working with public institutions to resolve nutrition issues.

Contribution to Solve Food and Health Issues

Addressing health issues

Performance

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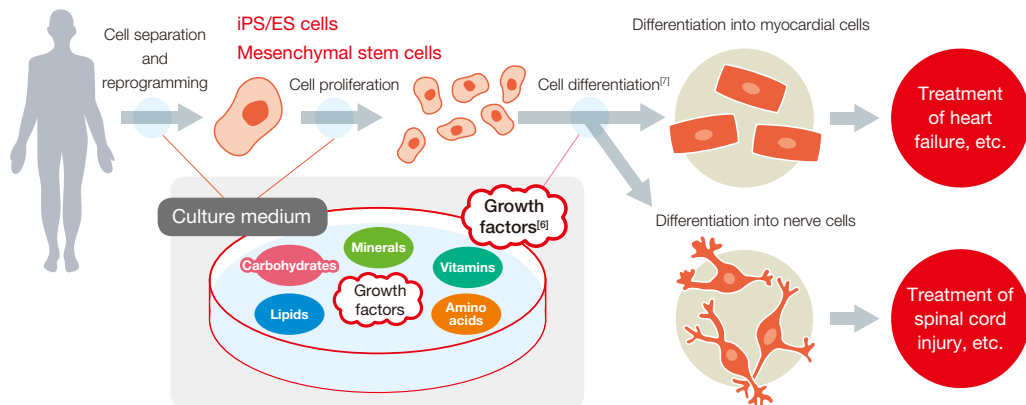
Making regenerative medicine^[1] a realityCommercial cell culture media^[2] for regenerative medicine

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 *StemFit® AK03*, an iPS^[3]/ES^[4] cell culture medium free of animal-derived ingredients, and launched this product in 2016 as *StemFit® AK03N*. In 2019, we began selling a culture medium for mesenchymal stem cells^[5] and hepatocyte differentiation and purification.

In February 2020, Ajinomoto Kohjin Bio Co., Ltd., a joint venture established in 2018 with Kohjin Bio Co., Ltd., completed construction of a plant to produce clinical media for regenerative medicine. The company completed validation (confirming equipment operates as designed) and quality inspection, and in August it launched production of subcontracted products, beginning with cell culture medium products for regenerative medicines ordered by the Ajinomoto Group.

We expect demand for cell culture mediums for regenerative medicine to grow in the future. 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 mediums for regenerative medicine in North America and other regions overseas.

Role of cell culture medium 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] Cells with the capacity to differentiate into osteoblasts, fat cells, muscle cells, chondrocytes, and other cells categorized as mesenchymal stem cells. These cells are expected to be used in the rebuilding of bones, blood vessels, myocardia, and other regenerative medicine applications.

[6] Proteins that promote the proliferation and differentiation of specific cells in human and animal bodies.

[7] The conversion of iPS/ES cells into cells of different tissues and organs that make up the body.

Contribution to Solve Food and Health Issues

Performance

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“AminoIndex technology”

AminoIndex®Risk Screening (AIRS®) is a unique Ajinomoto Group service that can assess the risk of the three major diseases (cancer, stroke, heart disease) and other conditions from a single blood test. *AIRS®* assesses risk based on the balance of amino acid concentrations in blood.

In October 2020, we added items assessing potential current cognitive decline to our *AminoIndex® LifeStyle Diseases (AILS®)*, launching this as a new service. In Japan, the number of patients with dementia is increasing in conjunction with aging demographics. One major health issue is the risk of diseases such as mild cognitive impairment^[1], which could be a precursor to dementia. Those with diminished cognitive function present significantly lower levels of amino acid concentrations for lysine, threonine, valine, leucine, histidine, glutamate, and asparagine compared with healthy persons. Therefore, our *AILS* (risk of diminished cognitive function) assesses fluctuations in amino acids such as these, clearly determining the potential for current cognitive decline.

We will continue to contribute to comfortable lifestyles for consumers by utilizing “AminoIndex technology” to expand services that will lead to the early detection and prevention of various illnesses as well as to provide integrated solutions services for food and health issues.

[1] A grey zone between normal function and dementia that has limited impact on daily life and cannot be diagnosed as dementia. It is estimated that between 10% and 15% of people with mild cognitive impairment develop dementia each year.

Performance

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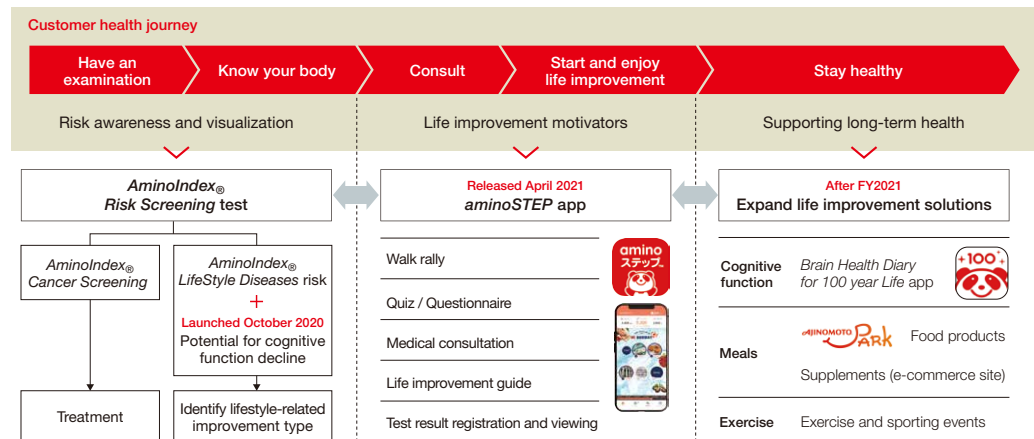
Smartphone app for enhancing lifestyle improvement solutions

In April 2021, we launched services for *aminoSTEP*, a smartphone app that provides information supporting lifestyle improvements for *AminoIndex® Risk Screening (AIRS®)* screening recipients and general users in Japan. This app, jointly developed with Mediplat Inc., is designed to improve satisfaction levels for *AIRS®* screening recipients through stronger post-screening support. The app also serves to help users understand their bodily health before the onset of illness, to change their behavior, and to improve their lifestyles. In addition to saving *AIRS®* test results and providing advice accordingly on lifestyle improvements, the app allows users to earn “amino mile” points through walking (based on step count). The app also offers fun health maintenance activities such as healthcare quizzes. Users have direct access to health consultations with doctors via the app chat function.

In April 2021, we released *Brain Health Diary for 100 year Life*, a smartphone app targeting general users aged 45 to 64. This app supports the upkeep of cognitive function through lifestyle-related improvements. We developed the app by using findings from collaborative research on cognitive function with the National Center for Geriatrics and Gerontology. By using this app, a user can record nutrients and quantities of meals from pictures taken with the user’s smartphone, as well as recording exercise and sleep times with minimal user difficulty. The app uses this data to provide a Cognitive Function Maintenance Score (out of 100) based on research into cognitive function maintenance. Users receive daily advice for improvement of diet, exercise, and sleep. We believe the *Brain Health Diary for 100 year Life* can be a long-term partner in maintaining cognitive function.

Contribution to Solve Food and Health Issues

Personalized nutrition ecosystem



Industry-academia collaborations for healthier lives

In April 2020, Hirosaki University and Ajinomoto Co., Inc., established the Digital Nutrition and Health Sciences Course, a joint research course^[1] on extending the healthy life expectancy under the Hirosaki University Graduate School of Medicine. Through this joint research course, we will develop solutions that will lead to the prevention of issues for the elderly and lifestyle-related diseases, contributing to improved health and nutrition.

[1] A research organization founded by the university and funded by private companies and other organizations. In addition to providing researchers, facilities, and equipment, the university hosts researchers from funding corporations and other organizations. In this way, the university and companies providing funding operate the research organization on an equal footing.

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Contribution to Solve Food and Health Issues

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TOPIC

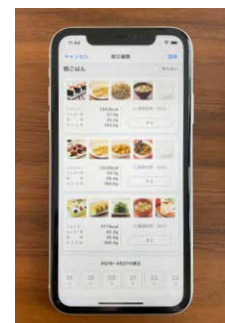
Initiatives to expand *Kachimeshi*® from top athletes to general consumers

Since 2003, Ajinomoto Co., Inc. has been leveraging the power of amino acids in our *Victory Project*®, an effort to support conditioning for Japanese national athletes and candidates to become more competitive internationally and to win more medals. We established the *Kachimeshi*® nutritional program by food and amino acids, utilizing the knowledge we have gained over many years of support, backed by sports nutrition science. Through this program, we support conditioning for top athletes competing on the world stage.

We have condensed this knowledge into *Kachimeshi*®, working to spread the program among general consumers in Japan. This program not only provides products and services leveraging the functions of amino acids, but also supports healthy living and conditioning by disseminating health and nutrition information as well as by offering easy-to-prepare, delicious meal plans arranged by theme. We are also active in local *Kachimeshi*® initiatives, using locally produced ingredients in collaboration with municipal governments and developing nutritionally balanced meal options suited to local dietary habits.

In fiscal 2021, we are strengthening cooperation with R-bies, INC.^[1] to launch new measures for *Kachimeshi*® for general consumers. In collaboration with R-bies and municipal governments across Japan, we plan to hold walking events and disseminate information about *Kachimeshi*® via local media. We will also conduct events and fairs at mass retailer stores, sponsor seminars, and hold other events related to *Kachimeshi*®. Our goal is to establish cooperation with a total of 13 municipal governments by deepening our efforts.

We are also working to use *Kachimeshi*® to better respond to needs for personalized meals. In March 2021, we launched a beta test release of our *Kachimeshi*® AI for middle school and high school athletes, as well as for the guardians who prepare their meals. Many middle school and high school athletes and their guardians have difficulty finding a practical method that suits their situation, even if they are highly mindful of physical fitness. *Kachimeshi*® AI offers a unique smartphone app, providing supervision by a registered dietitian in our *Victory Project*®. The app also provides specific meal options optimized to the unique situation of the athlete, backed by sports nutrition science. The system calculates the necessary nutrients required for each user and uses information from our *Ajinomoto Park* recipe database to present a day's meals meeting the various attributes of each middle or high school athlete. These attributes include age, height, body composition (weight / body fat percentage), and targets related to specific sports and body weight (maintaining current condition, losing weight, gaining weight). Learning from user feedback, the AI suggests menu options and meal quantities more suited to each individual. We will utilize the data collected from this test release to further evolve the app and make suggestions more suitable to each individual's lifestyle, aiming to contribute to the creation of a healthy body.



Kachimeshi® AI app screen

Based on the Japanese model, we have expanded *Kachimeshi* into six countries overseas, supporting the conditioning of athletes in each target country. In four of these countries (Thailand, Indonesia, the Philippines, and Singapore), we have also introduced our ASEAN *Victory Project* to provide nutritional and dietary support to athletes and sports teams.

[1] R-bies publishes the magazine *Runners* and organizes marathons and walking events.