

Ajinomoto Group

Sustainability Data Book 2017

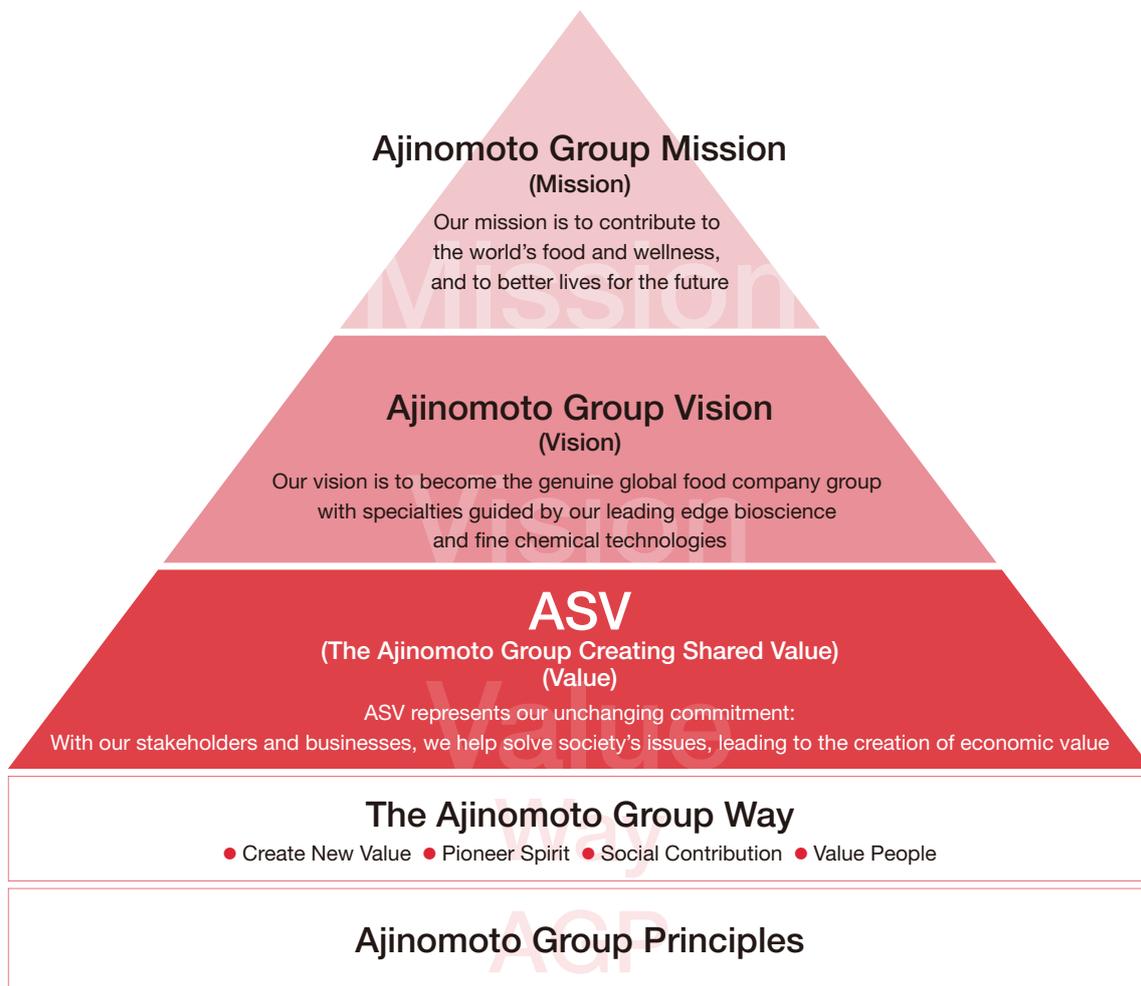
For the Future of People and the Earth



What the Ajinomoto Group Aims for

Our Philosophy

Corporate Message Eat Well, Live Well.

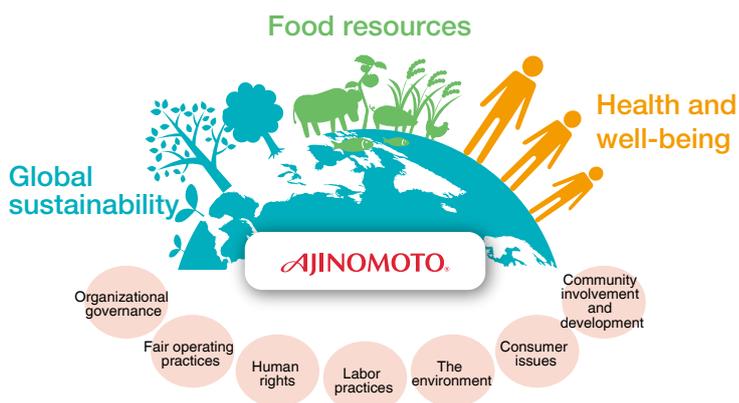


Ajinomoto Group Sustainability Data Book 2017 Editorial Policy

The Ajinomoto Group has published an Integrated Report since 2016, collating in narrative form the most relevant financial and non-financial information tied to enhancement of its corporate value.

Sustainability Data Book, a supplementary document of the Integrated Report, is published as a detailed reporting tool on the Group's sustainability activities. This book compiles sustainability features based on the Ajinomoto Group Creating Shared Value (ASV) as well as detailed reporting based on the seven core subjects of the ISO 26000 international standard on social responsibility.

The Ajinomoto Group's approach to achieving sustainability



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Published supplementary documentation

- Ajinomoto Group Principles & Policies
- Data version (personnel and labor/environment)

Website

<https://www.ajinomoto.com/en/activity/>

Organizational Scope

This report covers the activities of the Ajinomoto Group, comprising, unless otherwise noted, Ajinomoto Co., Inc. ("the company") and its Group companies (as of March 31, 2017), including consolidated subsidiaries and other Group companies subject to reporting under the equity method. Where sufficient information for the entire Ajinomoto Group ("the Group") was unavailable, the limitation in scope is explicitly defined.

Period Covered by This Report

Fiscal 2016 (April 1, 2016–March 31, 2017)

When appropriate, however, exceptions to this general rule are made, as when citing past circumstances and data or using recent examples for illustration purposes.

Issue date: July 2017 (Highlights version)

August 2017 (Full report)

Previous issue: January 2017

The Integrated Report 2017 is published on the company website:
https://www.ajinomoto.com/en/aboutus/integrated_report/



Resolution of Social Issues through ASV (Ajinomoto Group Creating Shared Value)

■ Participation in the global action to tackle global issues

The world is increasingly globalized, with each country and region facing issues threatening livelihoods and the global environment. Both developed and developing countries must tackle these issues and actively find solutions.

The UN Sustainable Development Goals (SDGs) consist of 17 goals and 169 targets to be achieved by 2030. A key principle of the SDGs is that, as well as the national governments, private companies and citizens also need to play a proactive role in the global effort.

As a global corporation, the Ajinomoto Group is committed to being a part of the global effort to achieve the SDGs.

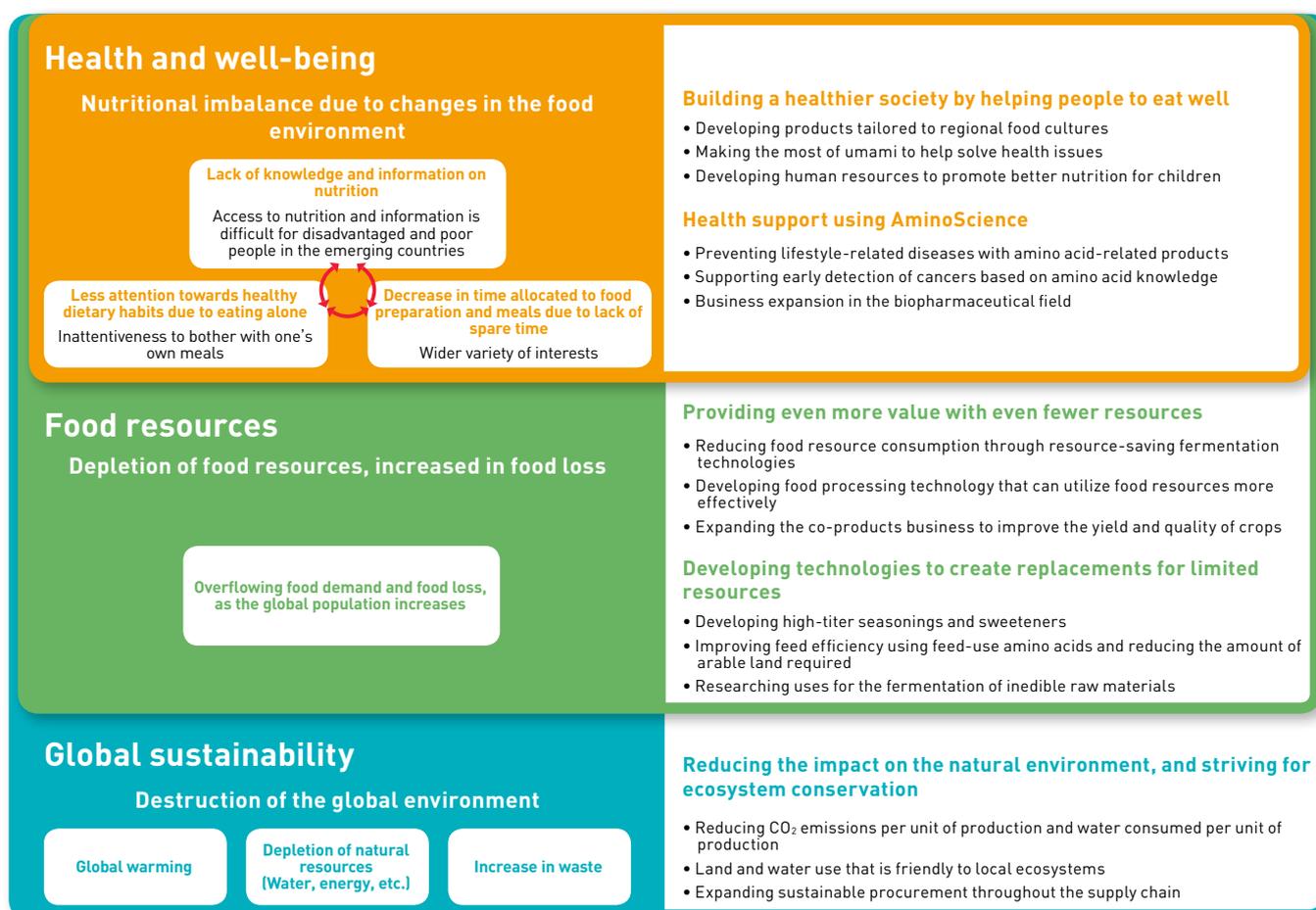


■ Approach to the issues facing 21st-century human society

In its centenary year of 2009, the Ajinomoto Group announced "three material issues facing 21st-century human society" to tackle through its business activities. To select these issues, the Group reviewed the UN Millennium Development Goals (MDGs), predecessor of SDGs, and engaged its stakeholders in the process to ensure diverse perspectives were included.

The issues selected were global sustainability, food resources, and health and well-being. The Group declared its commitment to put these issues at the center of its operations and address them through its business.

The Group regularly reviews the themes to focus its efforts on within these three issues to reflect social and business trends.



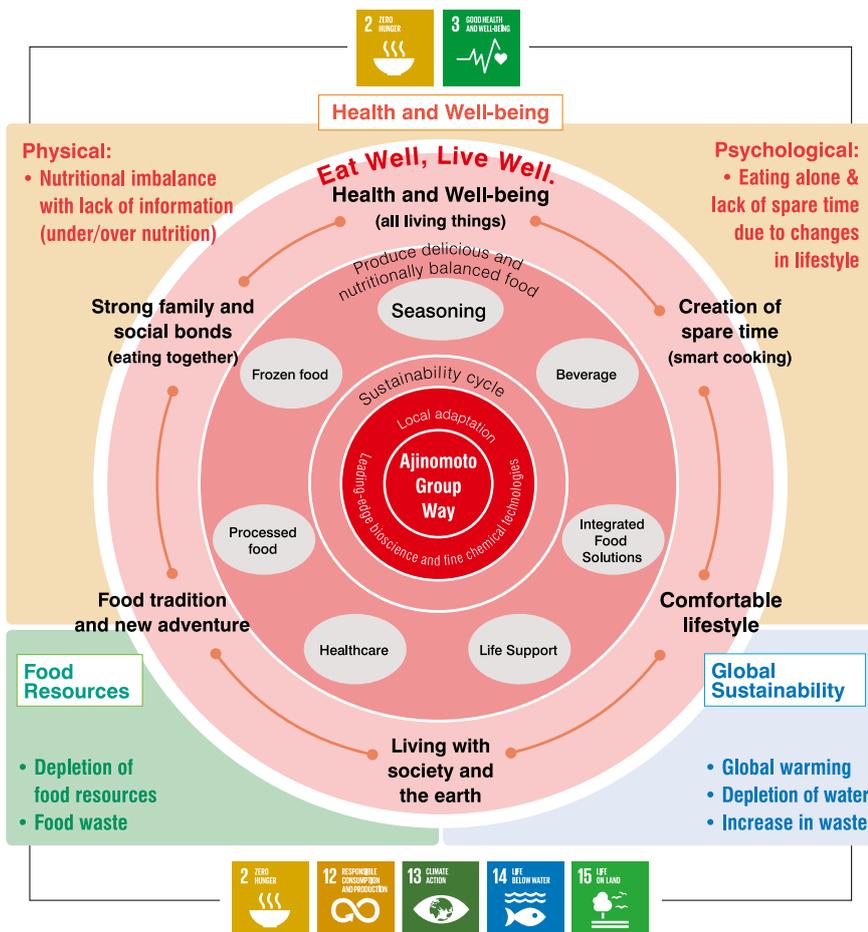
Creation of value through problem resolution

Since its foundation, the Ajinomoto Group has always focused on solving social issues through its business activities. Its success lies in creating values together with local communities and wider society. The group has named this philosophy at the heart of its business the Ajinomoto Group Creating Shared Value (ASV). The Group believes it can become a genuine global specialty company through ASV, and has developed its FY2017-2019 Medium-Term Management Plan (for 2020) centered on the evolution of ASV.

Social issues change constantly, and there may be more than

one way to solve them. As ASV is put into practice, it is important to stay aware of global issues and focus on using the Group's unique strengths, technologies and passions to tackle them. To do this, it is necessary to continue engaging stakeholders and communicating to consumers what the Ajinomoto Group believes and what actions it is taking.

The Ajinomoto Group's business is food, the foundation of all life. The Group will continue its efforts, confident that it can help solve social issues in its own unique ways.



ASV Value Creation Stories

- 1 We contribute to health and well-being by utilizing our leading-edge bioscience and fine chemical technologies, which also lead to deliciousness technologies, and by delivering good and healthy food
- 2 We contribute to the development of a society that enables strong family/social bonds and diverse lifestyles through eating well
- 3 We contribute to the sustainability of society and the earth with our customers and local communities, across the value chain from production to consumption
- 4 We co-create value with each region through the perspectives of the customers, with our global, top-class and diverse talent

Collaboration with society

Organizations with diverse talents



Social issues that the Ajinomoto Group aims to resolve



Values that the Ajinomoto Group aims to create

How Business Activities and Social/Economic Value Connect

“Genuine Global Specialty Company”

To become a global top 10 class food company that grows sustainably through ASV

Integrated Value

Corporate Brand

Enhance brand value through creating social/economic value, which leads to further value creation

FY2020 brand value target = US\$1,500 million or more

FY2020 Integrated Targets

Non-financial targets (social value)

Better nutritional balance by eating more proteins and vegetables with umami S
Meat and vegetable consumption through our products (Japan and Five Stars)

Meats: 8.6 million tons/year; 19% (9.7 kg/person/year)
 vs. FY2015 +3% (+2.0kg)

Vegetables: 5.5 million tons/year; 8% (6.2 kg/person/year)
 vs. FY2015 +2% (+1.6kg)

<Business activity example>

Produce good and healthy food menus with proteins and vegetables centered on umami

More eating together S
Contribution to eating together through our products (Japan and Five Stars)

70 occasions/household/year vs. FY2015 +20 times

Smart and delicious cooking S
Spare time created through our products (Japan)

38 million hours/year (6 hours/year/household)
 vs. FY2015 +7 million hours

<Business activity example>

Provide food products that enable smart and delicious cooking

People's comfortable lifestyle S
Contribution to comfortable lifestyle through our amino acid products (AminoScience)

22 million people vs. FY2015 +4 million people

<Business activity example>

Provide products supported by our amino acid technologies

Resolution of environmental issues E
Contribute to the global environment throughout the procurement, production, and consumption processes

Contribution to the global environment through initiatives ahead of standard international targets

<Business activity example>

Construct a value chain that optimizes the use of resources

Improved employee engagement G
Employees with high engagement 80%

<Business activity example> Improve working environments supported by ICT

Financial targets under IFRS (economic value)

Umami seasonings
 +100K tons

Flavor seasonings
 +90K tons

Total sales
¥1,350 billion
 (+¥260 billion)

Frozen foods
 +30 million packages
 Soups
 100 million servings

Amino acids
 +80K tons

Cost reduction
 -¥10 billion

Higher specialty ratio through innovation

Higher work efficiency supported by ICT
 -¥2.5 billion

Business profit
¥137.0 billion or more

Business profit margin
 10%

ROE
10% or higher

EPS growth rate
Double-digit annual growth

International sales growth rate
 (consumer foods)
 (local currency basis)

Double-digit annual growth

S: Social E: Environmental G: Governance

SDGs and Ajinomoto Group Business

The SDGs clearly specify the need to improve the nutrition of people in various countries and regions. The Ajinomoto Group believes it can help resolve this problem through business.

Stakeholder expectations (Excerpts from a survey of experts)

Health and well-being



- Promote the nutritional, healthy development of the poor, disadvantaged, and socially vulnerable in developing countries (particularly children under 5, girls, and pregnant and nursing women) through nutritious, inexpensive, and shelf-stable food products deployed on a global scale



- Address the nutritional challenges of seniors through research and development of functional food products, especially those that utilize amino acids



Nutrition Improvement Projects in Ghana and Malawi

Vietnam School Meal Project

Food resources and global sustainability



- Fishery resources in the waters around Japan and elsewhere are in a critical state. As their end product manufacturer, it is the Group's obligation to immediately address this issue to sustainably use these resources



- With the projected population increase and climate change, providing sustainable food production and consumption is very important for business. This will require support all the way up to the agricultural producers. Crop issues and factors that need addressing should be identified and given attention in order of priority



- Food waste is an issue that should be addressed with a set target, particularly in Japan. As an industrial leader, the Group can implement initiatives in partnership with the government sector, distributors, consumers, NPOs, and others



Contributing to sustainable farming through bio-cycles

Eco-friendly food life style



Participating in skipjack tuna tagging surveys

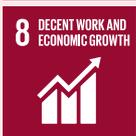


The Forest of Blendy® project protects forests and water resources

Fundamental business activities



- The responsibilities of cooking and childrearing rest on the shoulders of women, especially in developing countries. Women's empowerment is the shortest road to fostering the next generation, and even to speeding up social progress.



- Set a real example for what truly decent work without discrimination looks like. A positive spiral should be created in which working people take pride in being part of the Ajinomoto Group value chain, which in turn drives Group growth.



- Various hurdles stand in the way of solving nutrition and other complex social issues. The Group should overcome these hurdles by collaborating with stakeholders who share the same awareness of the challenges and, going further, should build and lead alliances to change social trends.



Hiring female sales reps for the Ghana Nutrition Improvement Project



Global HR managers meeting

Ajinomoto Group Materiality

Resolution of 21st-century human society issues

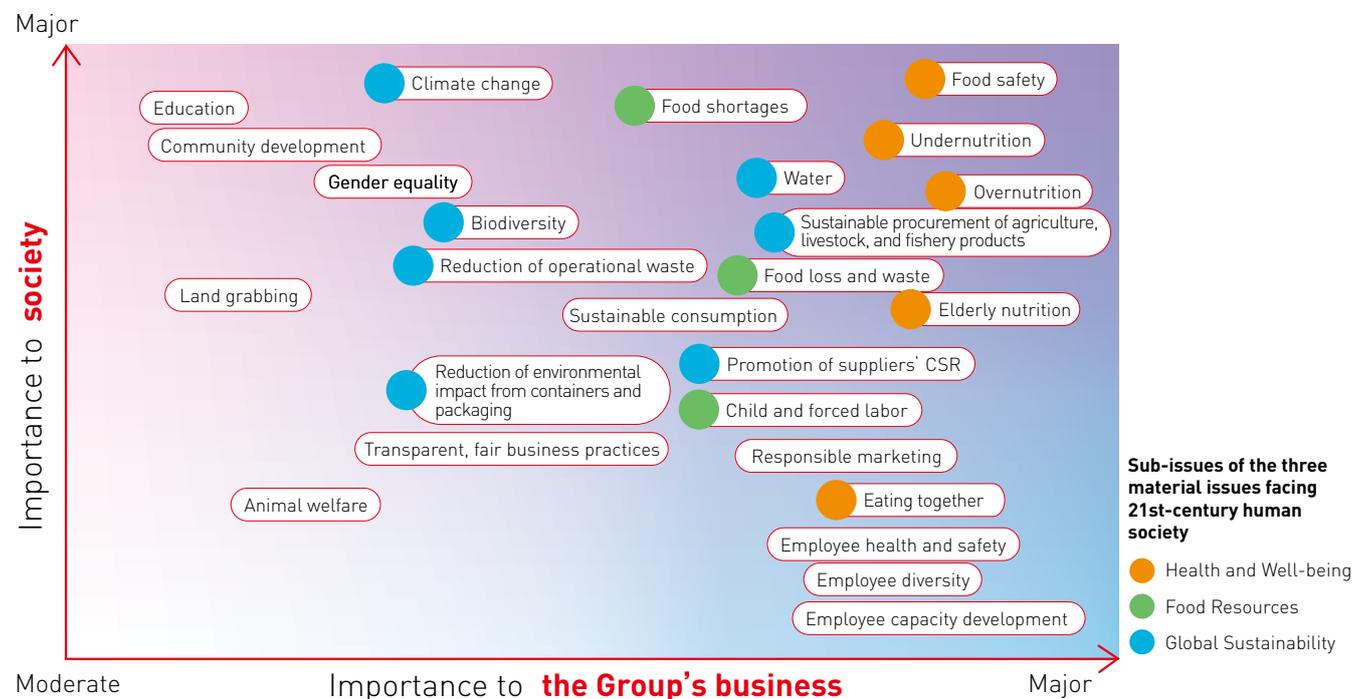
Following a series of internal and external discussions, the Ajinomoto Group clarified its position on resolving issues facing 21st-century human society at the time of its centennial anniversary in 2009, declaring its intention to contribute through business to three material issues: global sustainability, food resources, and health and well-being.

While committing to coexist and develop with society, each

department within the Group is tasked with laying out plans to address these issues using the Group's unique technological and product development expertise and value-chain influence.

Following multiple discussions, the Ajinomoto Group is rethinking the relationship between its business and social issues by selecting and organizing materiality items. The Group addresses these materiality items based on the following matrix, which was designed in 2015 and reviewed in 2017 to incorporate new social trends.

Materiality matrix of the Ajinomoto Group (Fiscal 2017 revised)



Materiality items updated

Since the Ajinomoto Group organized its materiality items in 2015, the world has witnessed significant progress on sustainability, including the entry into force of the Paris Agreement and the adoption of UN Sustainable Development Goals (SDGs). The Group also had a frequent discussion on materiality when determining its FY2017-2019 Medium-Term Management Plan.

In light of these new developments, the Ajinomoto Group felt it necessary to update its materiality items to better guide future initiatives.

The Group considered information from various sources when renewing its materiality items, including opinions from internal departments, and suggestions and opinions collected from 56 external experts via the survey on SDGs and expectations for the Ajinomoto Group.

[Major revisions]

Relative importance of individual items re-examined

The importance of the following items was raised to reflect a deep connection with Ajinomoto Group operations and growing external expectations for more aggressive action: sustainable procurement of agriculture, livestock, and fishery products; promotion of suppliers' CSR; food loss and waste; water; child and forced labor.

Additional items

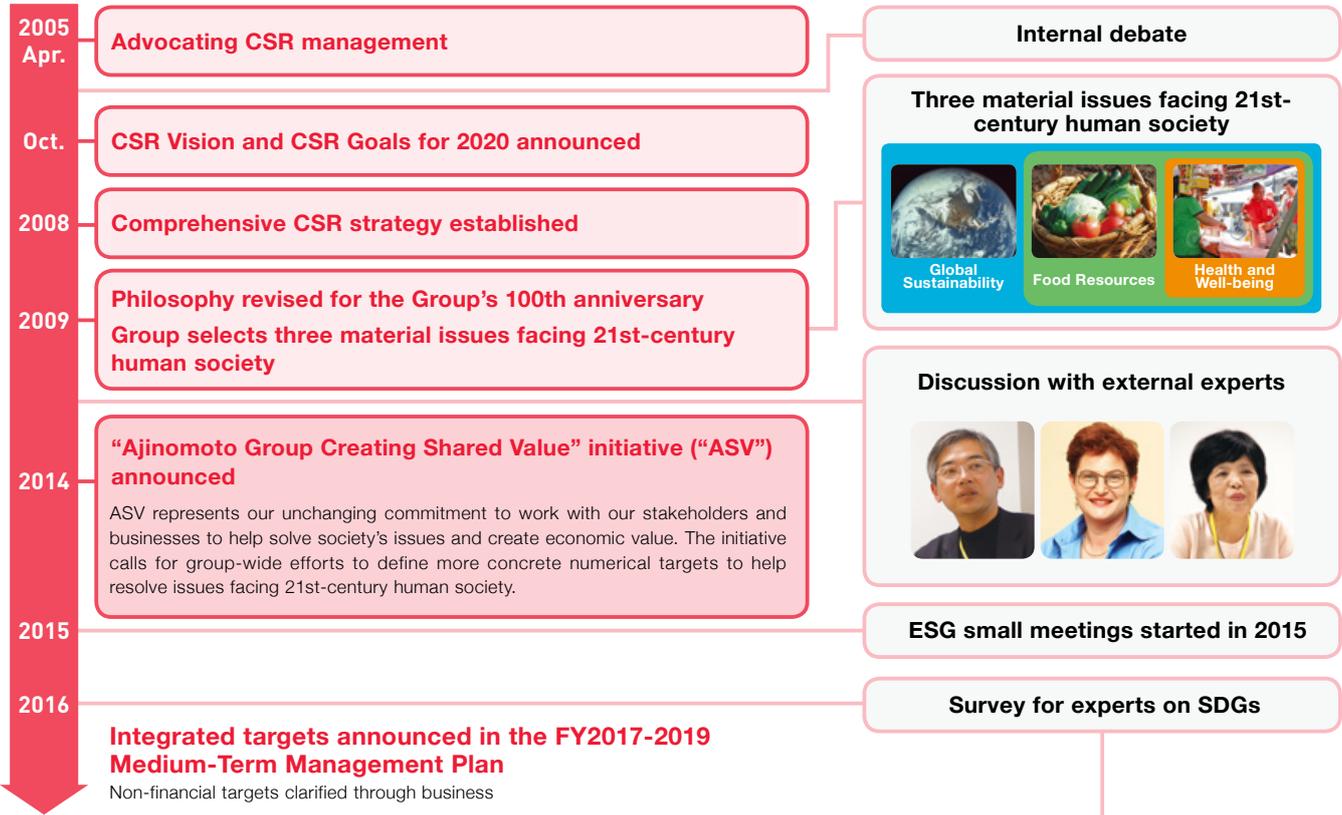
Items added to reflect the Ajinomoto Group Medium-Term Management Plan and SDGs: eating together; sustainable consumption, reduction of environmental impact from containers and packaging.

New terms and expressions

Human resources development was divided into employee capacity development and employee diversity. Preventing corruption was changed to transparent, fair business practice.

Identification of Material Issues

The Ajinomoto Group collects opinions from external experts in a variety of forms to help clarify the importance and priority of individual operations when creating value through business. We ask those experts to evaluate recent social trends and Ajinomoto Group activities. Opinions are shared internally at the business planning level to ensure the Group proactively pursues activities that fulfill social expectations.



Survey for experts

(Experts familiar with Ajinomoto Group activities, having participated in previous internal workshops and dialogues or cooperated on external activities)

Survey period: August 2016
Survey participants: 56 external experts

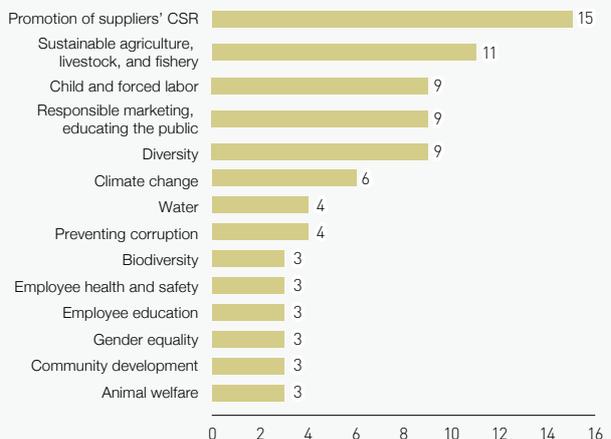
Excerpts from responses on review of materiality items

From an operational perspective, they apparently consider food and nutrition-related items are of high importance to society, but from a longer-term perspective, topics such as climate change, water, and waste reduction may well increase in importance.

The items in the top right of the matrix are extremely important operationally, but surely sustainable procurement of agriculture, livestock, and fishery products should also increase in importance, as a key input factor upon which continued operational development depends.

Promotion of suppliers' CSR should rank higher in importance both to society and the Group's business as the human rights' risks within the corporate value chain rise across the supply chain.

Materiality items warranting higher importance (multiple responses allowed)



Dialogues and Collaboration with Stakeholders

To become and grow as a truly global company trusted by people around the world, the Ajinomoto Group needs to maintain ongoing dialogue with various stakeholders and incorporate their feedback into its corporate activities. Through continuous dialogue and collaboration, the Group endeavors to make a positive contribution to society and the environment.



Stakeholder group	Key engagement opportunities	Results
Customers/Consumers	<ul style="list-style-type: none"> Customer call centers (five food companies in Japan, certain overseas subsidiaries) "AJINOMOTO PARK" recipe & community website Various events Factory tours 	<ul style="list-style-type: none"> Used customer input to improve products and services Made efforts to improve customer satisfaction with product investigations (→Consumer Issues P129-132) Cultivated the awareness of the Group's sustainability efforts and a sustainability mindset of event participants (→Consumer Issues P133-136) Hosted factory tours at three Ajinomoto Co., Inc. business sites in Japan for around 58,000 people (FY2016)
Shareholders/Investors	<ul style="list-style-type: none"> Annual general meeting of shareholders Analysts' meetings on financial results Individual dialogues with institutional investors worldwide Briefings for institutional investors on ESG (environment, society, governance) efforts 	<ul style="list-style-type: none"> Strengthened corporate governance system (→ Integrated Report 2017 P50-61) Updated Corporate Governance Report (end of June 2017) Ajinomoto Group Integrated Report 2017 (end of July 2017) 3rd Environment, Social and Governance (ESG) Meeting for analysts and institutional investors "Contributing to a healthier life through food and amino acids" (March 2017)
Suppliers	<ul style="list-style-type: none"> Communication in day-to-day business Food defense explanatory meetings and audits SAQs (self-assessment tool for suppliers) 	<ul style="list-style-type: none"> Suppliers gained awareness of the CSR issues they need to address (→Fair Operating Practices P58) Conveyed the Group's thinking and plans for more sustainable procurement of each key raw material (→Fair Operating Practices P59-62)
Employees	<ul style="list-style-type: none"> Ajinomoto Group Way sessions ASV (Ajinomoto Group Creating Shared Value) sessions By-rank/division training Ajinomoto Group Principles (AGP) questionnaires AGP worksite discussions Whistleblower hotline Harassment advisory service 	<ul style="list-style-type: none"> Approximately 33,000 group employees worldwide have attended Ajinomoto Group Way sessions as of the end of FY2016 All employees are scheduled to attend the ASV session by the end of FY2017 (→Labor Practice P74) AGP awareness: 31 worksite meetings on AGP, attended by 297 participants in FY2016 (→Organizational Governance P53) Number of hotline reports: 63 reports to Japan group companies in FY2016 (→Organizational Governance P53)
Local communities	<ul style="list-style-type: none"> Factory dialogue with neighborhood residents Participation in and sponsorship of community events Scholarships and other foundation-based activities (in four countries) Recovery assistance for communities affected by natural disasters Smile Earth! community environment program 	<ul style="list-style-type: none"> Launched an environmental monitor system (Kawasaki Administration & Coordination Office, Ajinomoto Co., Inc.), held meetings with neighborhood associations and joined local events Supported the Red Apron Project since 2011, providing nutritional guidance and facilitating communication through cooking classes for those affected by the Great East Japan Earthquake (2,452 events for approximately 31,500 participants by March 2017) (→Community P147-148)
NPOs/NGOs and external experts	<ul style="list-style-type: none"> Ajinomoto Group Sustainability Forum Dialogue on the Group's sustainability and CSR activities AIN program for supporting NPOs/NGOs working in the food and nutrition field 	<ul style="list-style-type: none"> Discussed internally how to incorporate various opinions received through dialogue into sustainability and CSR plans (→Ajinomoto Group Business and CSR P8-12) AIN program results (FY1999 through FY2016, include ongoing): 79 projects in 14 countries, approximately 140,000 beneficiaries, representing a 310-million-yen grant (→Community P141-142)

Feedback from external stakeholders

I understand this as an expression of the Ajinomoto Group's deeper commitment to common social challenges under the international framework of the SDGs. In order to join a top 10 global food companies, it is important that the Group ensures the sustainability of its raw materials by considering all aspects of its supply chain, including water, land and energy issues as well as the livelihood and human rights of workers in the supply chain. It also needs to ramp up its activities on a higher plane; for example, it could apply its unique expertise in AminoScience to reduce the

environmental impact of food production drastically. Food is one of the most basic foundations of human society. The company could make contributions far wider than the SDG challenges presented in the medium-term plan. For example, transforming dietary and cooking habits and offering smart cooking solutions for diverse lifestyles could contribute to Goal 5: Gender equality. I hope to see the Ajinomoto Group emerge as a true global leader of the food industry.



Naoki Adachi
CEO, Response Ability, Inc.

We are facing food shortages as global warming accelerates and conflicts and terrorism destroy communities and agricultural land. At the same time, food loss is a major global issue. I believe the Ajinomoto Group has a major role to play in the effort to reduce raw material losses in developing countries as well as consumer education in developed nations. In order to achieve the SDGs on sustainable production and consumption, the company should not only focus on the product lifecycle perspective in its corporate activities but also tell consumers the stories of "the life of things", all the

way from raw materials to eventual disposal at home.

I believe that the food industry, which uses agricultural, livestock, and fisheries products as raw materials, should take a proactive stance towards sustainable procurement, which can have an impact throughout global supply chains. I would like to see the Ajinomoto Group use all its technologies to lead the world and make a great contribution to the lives—especially dietary lives—of people around the world.



Minako Oishi
Director & Vice Chair,
Nippon Association of
Consumer Specialists

Feedback from external stakeholders

In the non-financial information disclosure of the Ajinomoto Group, the environmental goals appear to be both bold and concrete.

On the other hand, when I look at the social goals and indicators, it seems to me that they have been linked to the business domains in a rather unnatural way. Wouldn't it be better to be more straightforward and set goals such as, to give a few examples, "the protection of workers in our global supply chain and the protection and support of producers and suppliers," or "nutritional support in countries where malnutrition is an issue," "the provision of adequate

nutrition in countries where obesity is an issue," etc.

When it comes to governance related goals, including nuances such as, for example, "a highly diverse work force working with a high degree of integrity," or "creating a world class workforce responsive to and collaborating with our stakeholders" would sound more proactive.



Peter David Pedersen
Executive Director, TAOL

The food industry is closely linked to all of the Sustainable Development Goals (SDGs). In addition to eradicating hunger, improving nutrition, security and safety of food resources, reducing waste and managing water, the eyes of the world have been on the human rights and climate change issues over the past few years within the ever expanding global supply chains. Consumers are increasingly making food choices based on producers' social and environmental records.

The international NGO Oxfam has been running the "Behind the Brands" campaign since 2013, in

which they assess the environmental and human rights efforts of the top 10 food and beverage companies.

The most urgent issues include increasing the earnings of small-scale farmers, expanding the participation of rural women in decision-making, protecting land rights, and improving working conditions in farms and fish processing factories. In order to solve these issues, food companies must have sufficient dialogues with communities, collaborate with other companies in the industry and governments to achieve collective impact, and ensure responsible procurement practices.



Kaori Kuroda
Executive Director,
CSO Network Japan

Feedback from external stakeholders

Human rights considerations are an essential part of any business activity.

A global company must operate on the understanding that human rights violations cannot always be prevented and, on that basis, ensure that it has the necessary governance structure in place to resolve these issues earnestly as and when they arise. To do so, it must have full traceability across its entire value chain from raw material procurement to sales. It must also review potential human rights risks in advance, and clarify who is responsible in each of those areas within the group

or the supply chain. It should also listen to stakeholders affected by human rights issues, and establish a transparent governance framework for making improvements that reflect their inputs.

Even if problems do arise, a company that is able to tackle them diligently and appropriately can indeed improve its reputation.



Makoto Teranaka
Visiting Professor, Faculty of
Contemporary Law, Tokyo Keizai
University

The United Nations Decade of Action on Nutrition kicked off in 2016, urging public and private sectors to tackle the double burden of malnutrition across the globe: hunger and micronutrient deficiency on one side, and obesity on the other. The Ajinomoto Group has taken up the challenge and launched the Ajinomoto Group Creating Shared Value (ASV) initiative in February 2017. It aims to increase economic value through the creation of social value, as well as contributing to the resolution of social issues such as improving nutrition. The Group has proven know-how, through providing

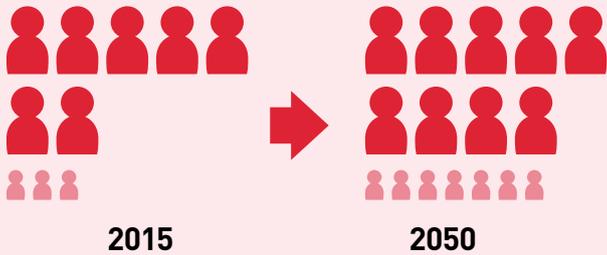
AJI-NO-MOTO[®] and flavor seasonings, to help people eat a wider variety of food. It also has a global network across countries at different stages of economic development, and an insight into enriched food cultures based on diverse ethnic and faith traditions, dietary customs, and food production approaches. For nutritional improvement, it is essential to secure the quantity, quality, and variety of foods. I look forward to seeing the Ajinomoto Group making the most of its expertise and playing a leading role in the creation of CSV business models in this area.



Yasuo Endo
Ph.D. in Agriculture
Senior Researcher &
Advisor, Sendai University

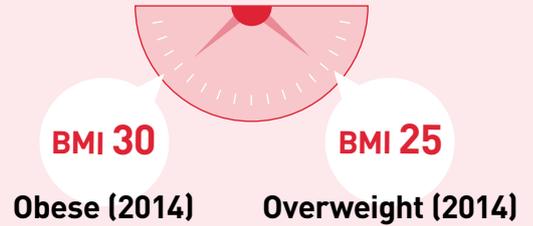
Health and Well-being

Global population



2015 **7.3 billion**^[1] → 2050 **9.7 billion**^[1]

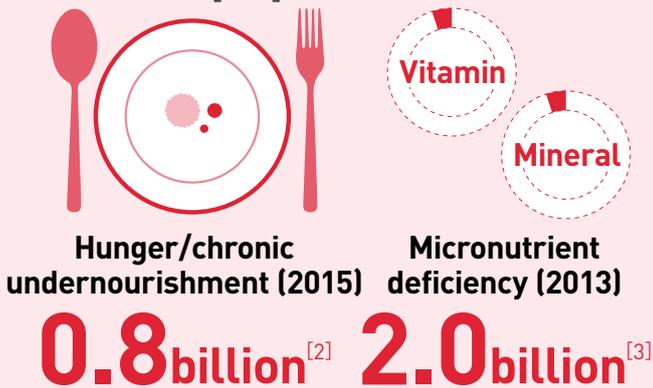
Overnourished population



0.6 billion^[4] **1.9 billion**^[4]
 (Roughly doubled since 1980)

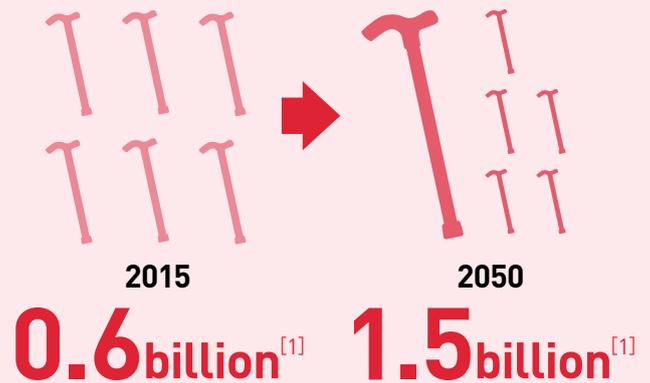
Global challenges

Undernourished population



Hunger/chronic undernourishment (2015) **0.8 billion**^[2] **Micronutrient deficiency (2013)** **2.0 billion**^[3]

Population aged 65 and over



2015 **0.6 billion**^[1] → 2050 **1.5 billion**^[1]

[1] UN (2015) [2] FAO (2015) [3] FAO (2013) [4] WHO (2015)

■ Ajinomoto Group's aim

The Ajinomoto Group aims to break new ground on the future of food, which is essential for humans to live, in partnership with our stakeholders. With concrete goals, we take on the challenge of realizing the health and well-being of people around the world.

Leveraging our expertise on food and amino acids accumulated since our founding, we contribute to the resolution of nutritional issues on various levels in the 130 countries and regions where we retail our products.

Closely linked SDGs



Ajinomoto Group Nutrition Policy

Adopted July 2017

- 1 We aspire to focus on the nutritional needs of people of different regions, ages, lifestyles, and health conditions and provide products and information that improve the nutritional balance of daily meals.
- 2 We assist people in enjoying delicious food and contribute to emotional and physical nourishment through smart cooking* and recommendations of delicious menu utilizing Umami.
- 3 We provide reliable solutions based on scientific research that utilize the nutritional and physiological properties of protein and amino acids.
- 4 We assist consumers in the selection of more healthy food products by devising and implementing voluntary labelling and communication strategies while following guidelines of national and public agencies.
- 5 We continue to conduct socially beneficial activities related to nutrition and build ties with diverse stakeholders.

*Enabling consumers to have enjoyable and efficient experiences in preparing meals including shopping, cooking, and cleaning up after meals.

FY2020 Integrated Targets for creating social value

1 Better nutritional balance by eating more proteins and vegetables with umami



Meat and Vegetable consumption through our products (Japan and Five Stars)

<p>Meats</p> <p>8.6 mil. tonnes/yr</p> <p>19% (9.7kg/person/yr) vs. FY15 +3% (+2.0kg)</p>	<p>Vegetables</p> <p>5.5 mil. tonnes/yr</p> <p>8% (6.2 kg/person/yr) vs. FY15 +2% (+1.6kg)</p>
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Japan: Five types of Cook Do® products, Gyoza (Chinese dumplings), Five Stars: flavor seasonings

2 More eating together



Contribution to eating together through our products (Japan and Five Stars)

70 times / households / year
vs. FY15 +20 times

Japan: Five types of Cook Do® products, Gyoza (Chinese dumplings), Five Stars: flavor seasonings

3 Smart and delicious cooking



Spare time created through our products (Japan)

38 mil. hrs / yr (6 hrs / yr / households)
vs. FY15 +7 mil. hrs / yr

Japan: Gyoza (Chinese dumplings), Yawaraka Wakadori Kara-Age (fried chicken), The ★CHA-HAN (fried rice)
Soup: Three types of Knorr® Cup Soup

4 People's comfortable lifestyle



Contribution to comfortable lifestyle through our amino acid products (AminoScience)

22 mil. people
vs. FY15 +4 mil. people

Health food and pharmaceutical amino acids: for use in transfusions and medical food, amino VITAL®, No Mikata®, Glyna®, etc.

Provision of delicious, nutritious food

Health and well-being to the world over

The Ajinomoto Group has developed worldwide operations based on the principle “Eat Well, Live Well.” reflecting the founder’s hope to promote human health with delicious and nutritious food. At the core of the principle sits umami, the basic taste discovered from *dashi*.

Umami is not exclusive to Japan but is found in various foods worldwide, such as tomatoes and cheese. There are many umami-rich delicious recipes all over the world made from easily available local ingredients.

In considering the essence of food, the taste of each dish is of course important, but so is nutritional balance. The *ichiju-sansai* (a soup and three dishes) menu in Japanese food is a good example of a well-balanced meal.

The Ajinomoto Group seeks to use such wisdom cultivated in Japan to develop and offer products tailored to the lifestyles, habits and needs for food of each country or region, while striving to communicate and share information on how to make well-balanced meals with local ingredients and menus.

The Group helps resolve global nutritional issues by developing deep-rooted local operations conforming to each area’s conditions.

We also suggest ways to improve the “scene” for good meals. We assist people making food easily and enjoying a delicious meal together with family and friends, so that they can share the joy of eating beyond the generations. “Eating together” can satisfy the appetite, and gently nurture the soul.

Health and well-being for people everywhere. The Ajinomoto Group will continue to challenge.

Menus offering delicious, well-balanced food

For healthy living, it is vital to carefully consider meals for everyday, such as “what do we eat?” and “how do we eat?” The Ajinomoto Group proposes not only optimal locally tailored products but also well-balanced, nutritious menus that address the different nutritional issues in each country or region.

Masako®



PT Ajinomoto Indonesia suggests nutritionally balanced menus on the back of the *Masako*® flavor seasoning package, and taking into account eating habits and nutritional issues in Indonesia, makes a proposal, by TV ads, to promote delicious menus for eating together that enrich the body and soul.



Love Vege®



“AJINOMOTO PARK” Love Vege feature
The Ajinomoto Group Love Vege® initiative seeks to boost daily vegetable consumption to 350g.

Ajinomoto Co., Inc. Nagoya Branch launched the *Love Vege*® project in fiscal 2015, encouraging people to prepare more tasty vegetable dishes to boost vegetable intake and suggesting various recipes with seasonal vegetables that can be cooked within 30 minutes.

Reference

Love Vege® Special feature on “AJINOMOTO PARK” (Japanese)
<https://park.ajinomoto.co.jp/recipe/corner/lovevege>

Reference

Sustainability Data Book 2016, Special Feature 1 P5

Products for cooking traditional local foods more simply and tastily

In the world, there are each "deliciousness" cultivated for long time, and food needs from various values and tastes. The Ajinomoto Group offers a wide range of seasonings that make it easier to use local *dashi* and cook tasty local home food.

Sarsaya®



Sarsaya® liquid seasoning, sold by Ajinomoto Philippines Corporation, is a genuine oyster sauce based on concentrated oyster extract. Sarsaya® makes kids happy by enhancing more tasty Filipino traditional home cooking food.

SAORI®



SAORI® liquid seasoning, sold by PT Ajinomoto Indonesia, was designed as a concept of simple and new oriental tasty cooking for your dishes. SAORI® is sold in small individual bags to make it affordable for the consumer, along with suggested recipes using popular local ingredients such as Chinese water spinach and tofu.

Promotion of well-being through cooking together and eating together

To achieve health and well-being, it is necessary to approach food from many different angles. The Ajinomoto Group seeks to explore the significance and potential of food and nutrition with people worldwide through products, services and communication with consumers.



Ajinomoto Frozen Foods Co., Inc. introduces easy-to-eat menus on its website that even elderly people who find it hard to chew can enjoy. Using frozen foods and cutting the ingredients into smaller pieces or adding a starchy sauce are a few ways of helping seniors to enjoy the same foods as their families.

Reference

Grandma, Grandpa, let's eat! Frozen food techniques (Japanese)
<https://www.ffa.ajinomoto.com/recipe/katsuyoujutsu>



Ajinomoto Co., Inc. pursues initiatives that spread "eco-friendly food life style" for enjoying delicious food without wasting ingredients. By providing opportunities to think about eco-friendly food life style, the company communicates the joy of easy cooking for all, and eating together.

Reference

Consumer Issues P133-136
 Sustainable Lifestyles, Starting with the Dining Table

Reference

Ecolife starts with food (Japanese)
<https://www.ajinomoto.com/jp/activity/environment/eco/>

Better Health through Nutritional Balance



Balanced meal proposals for each and every lifestyle goal

■ *Kachi-Meshi* coordinates daily nutritional balance

Food is a critical component of daily living and everyone hopes for a life of delicious, healthful eating. A basic requirement of physical health is to eat balanced meals, but modern lifestyle habits and changes have given rise to nutritional issues, such as not getting enough protein and vegetables, or getting too much sugar and fat, in one's food every day.

The Ajinomoto Group has developed world-leading strengths in product development and value proposition through the research of food and amino acids since its founding. The Group hopes to offer products and recipes best suited to the health needs of individual consumers by utilizing our knowledge. One such offering is *Kachi-Meshi*, which translates as "winning meals", a meal program by Ajinomoto Co., Inc. designed to put into practice the concept of "Eat Well, Live Well."

■ Application of conditioning insights from athletes

Kachi-Meshi began as a sports nutrition program developed by Ajinomoto Co., Inc. for top athletes. Since 2003, the company has been conducting the *Victory Project*® in partnership with the Japanese Olympic Committee (JOC), supporting the conditioning of the Japanese national team and candidate athletes with food and amino acids. The experiences and knowledge gained from providing nutritional management advice and planning meals for these athletes are now being applied to *Kachi-Meshi* for general consumers.

■ Proposals for eating with a sense of purpose

Kachi-Meshi places the emphasis on thinking about not what but why we eat. It recommends getting three balanced meals per day, utilizing snacks to get the necessary nutrients when needed, all in accordance with one's physical fitness and health maintenance goals. For those practicing it at home, it suggests ideas on how to make use of umami-rich soups for getting sufficient protein and vegetables.

The Ajinomoto Group believes this physical health and conditioning approach through food is effective not only for professional and student athletes with an active lifestyle of sport, but also for students wanting to take entrance exams in top physical condition, those challenged by seasonal heat and cold, young adults who have a habit of skipping meals, and people with various other goals and needs.

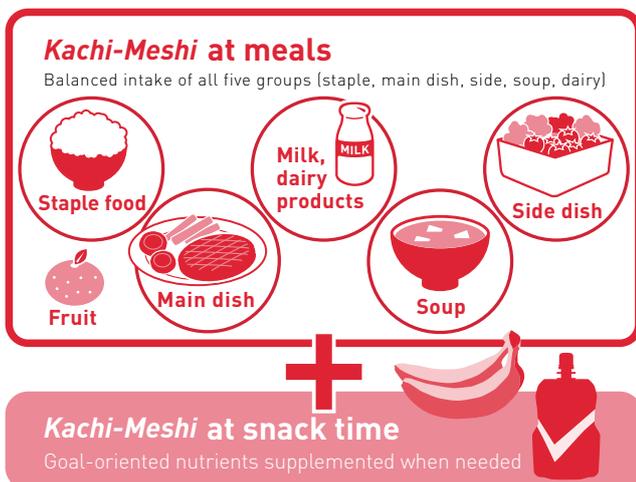
Through continued research, the Ajinomoto Group also aims to devise more reliable propositions for various needs, such as middle- and older-aged adults wanting to improve their lifestyle after receiving the results of a health checkup, or seniors wanting to maintain a youthful lifestyle despite the bodily changes that accompany aging.

Reference →

Kachi-Meshi recipes on "AJINOMOTO PARK" webpage (Japanese)
<http://park.ajinomoto.co.jp/recipe/corner/kachimeshi/>

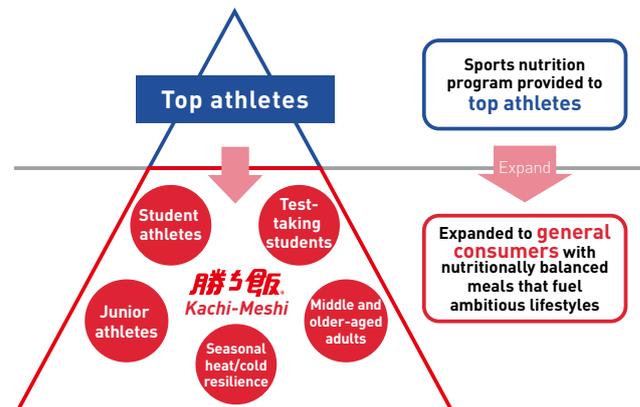
Reference →

Sustainability Data Book 2016, Special Feature 1 P6



Know-how gained from supporting top athletes made accessible to general consumers.

Recipes with Ajinomoto products provide nutrients necessary for achieving one's physical health goals.



Nutritional needs satisfied with diverse products

Lifestyles lacking in nutritional balance are a major cause of health issues around the world. Obesity, once prevalent in developed countries, is now on the rise in emerging countries due to the growing popularity of high-fat, high-calorie Western diets. Obesity is a risk factor that increases the patient of lifestyle diseases such as diabetes and hypertension, and also shortens life expectancy. Solving these issues is important to improve the nutritional balance of day-to-day foods.

The Ajinomoto Group is helping to address such health issues

by providing seasonings, sweeteners, and processed foods with low-sugar, low-fat, and low-salt content.

Because simply using less seasoning to reduce sodium tends to result in a disappointing taste, using umami-rich ingredients and improving preparation methods can be effective in achieving sodium reduction while maintaining satisfaction. Based on its umami know-how, the Ajinomoto Group will offer to the general public ideas for making use of umami to reduce sodium intake.

Low-sugar products



PAL SWEET[®] FIT[®] Blendy[®] Stick Café au Lait (coffee mixes), unsweetened

Low-fat products



Blendy[®] Stick Café au Lait (coffee mixes), half calories Pure Select[®] Low-Calorie Kokuuma Calorie 65% Cut marim[®] Low-fat Type

Low-salt products



YASASHIO[®] Low-salt HON-DASHI[®] Ajinomoto KK Consommé (low-salt) Marudori Gara Soup (low-salt) Knorr[®] Cup Soup creamed corn variety with 40% less salt TAI PEI[®] series

TOPICS

Development of tasty low-salt products with advanced technologies

Excess sodium intake raises one's risk of developing cancer, heart attack, stroke, or various lifestyle diseases. Research shows that Japanese men and women today consume 11.0 and 9.2 grams of sodium per day on average, respectively, exceeding guidelines set by the Ministry of Health, Labour and Welfare (8.0 and 7.0 grams), and far exceeding World Health Organization (WHO) recommendations (5.0 grams). A similar trend can be seen globally, with sodium intake in many countries far exceeding the WHO guidelines, making excess sodium a major problem worldwide, not just in Japan.

To address this problem, Ajinomoto Co., Inc. has been conducting research to develop tasty foods with gradually reduced sodium ratios. It has taken particular interest in the ability of amino acids to enhance salty taste, of γ -PGA^[1] to mask the bitterness of salt alternatives, and of unique flavoring ingredients and seasonings to increase eating pleasure. By combining these in ways suited to each product category, the company is developing technologies to achieve sodium reduction levels above 50%.

These technologies are being applied to products in Japan as well as those of Ajinomoto Windsor, Inc. in the U.S. With one frozen rice product, a 30% reduction in sodium was achieved.

"We're maintaining our global leadership and deepening efforts to solve social issues by finding new sodium-reducing ingredients and developing their advanced applications."



Product developers at the Institute of Food Sciences and Technologies

[1] γ -PGA (gamma polyglutamic acid): A polymer of the amino acid glutamic acid, known as a constituent of natto that gives it its slimy texture. It is produced by fermentation of sugarcane.

The Value of Amino Acids and Umami Shared Worldwide



Discovery of umami and fermentation methods stem from ancient Japanese wisdom

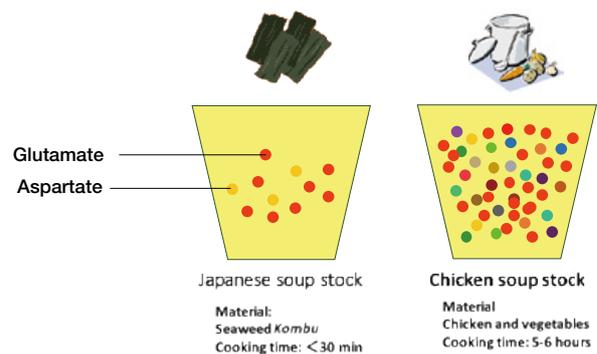
Amino acids are the font of all life on earth, and about 500 different kinds have been found in the natural world. Of those, only 20 make up protein in the human body. Glutamate, synthesized in all living things from microorganisms to plants and animals, is one of most prolific amino acids in the natural world. Large amounts of glutamate are present in foods, especially in breast milk. In other words, everyone the world over has a close relationship with glutamate from the instant they are born.

Glutamate is vital to sustaining life, but its taste was not discovered until 110 years ago, when a Japanese professor, Dr. Kikunae Ikeda, identified monosodium glutamate (MSG) as the main ingredient of *kombu* kelp broth (dashi), and named this entirely new taste “umami.” Japanese food culture had a huge impact on this discovery. Western and Asian soup stock is produced by slow-cooking meat and vegetables, which includes nearly all 20 types of amino acids. In contrast, the main ingredient of Japanese *kombu* dashi is glutamate, a fact that contributed to the discovery of its taste.

Having discovered the umami taste, Dr. Ikeda continued his research to improve the nation’s nutritional status by creating an umami seasoning that people could use in their everyday lives, and developed a manufacturing method for MSG. In 1909, umami seasoning was first marketed as a product called *AJI-NO-MOTO*[®], marking the birth of Ajinomoto Co., Inc.

A variety of methods of efficiently producing glutamate were tested before settling on today’s common fermentation method. Given its humid climate, Japan is famous for its unique range of traditional fermented foods. At the same time, Japan was blessed with microbe-rich soil and superior microbe and fungi research skills, which helped establish the fermentation techniques required to produce glutamate. The acquired technology was also used to develop techniques for manufacturing many other amino acids, and became the cornerstone for the significant development of the amino acid industry.

Soup stock in Japan and other countries



UMAMI Project teaches the value of umami

Everyone around the world experiences the umami taste of glutamate every day, but the umami taste is subtler than the more obvious sweet, salty, sour, bitter tastes. That said, the umami taste forms the basis of Japanese cuisine, and more and more people are beginning to recognize the link between umami and long life in Japan. Against this background, the Ajinomoto

Group believes it is important to globally disseminate the value of umami, based on scientific knowledge, to a broad range of people from experts to the general public. Since launching its UMAMI Project in 2017, the Group has been communicating the value of umami and MSG from a variety of perspectives.

UMAMI Project major activities

<p>Expert research, investigation and analysis</p> <p>Researching, investigating, analyzing and verifying the value of umami from a social anthropology and life science perspective.</p>	<p>WORLD UMAMI FORUM (temporary name)</p> <div style="display: flex; justify-content: space-between;"> <div> <p>UMAMI recipe contest</p> <p>Encouraging people in different countries to send in unique local umami menus, and sharing those menus globally. Developing entertainment to communicate and share the value of umami.</p> </div> <div> <p>UMAMI Conference</p> <p>Planning to hold an international umami conference in New York in 2018, designed to expand the appeal of umami/MSG by encouraging science communication from a new angle; inviting nutritional experts to round tables, discussion sessions and exhibits about the good taste and umami/MSG as well as its health and nutritional value.</p> </div> </div>	
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Promotion of Umami/MSG across the globe

The Ajinomoto Group holds a range of seminars and lectures to help expand umami/MSG knowledge worldwide. The Group focuses on seminars including tasting sessions that enable participants to taste umami, feel and comprehend the benefits of MSG for themselves, and explain it in their own words.

■ UMAMI Seminar at Cairo University, Egypt

The Faculty of Agriculture of Cairo University is one of the oldest and largest educational institutions in the Islam world. In October 2016, the Faculty hosted an UMAMI Seminar, which provides an opportunity to deepen understanding about the value of umami, with full support from Ajinomoto Co., Inc. and NPO Umami Information Center. The aim was to promote international cooperation between industry and academia, and to help improve the health of Egyptian citizens by incorporating umami into Egyptian food.

The seminar was split into theoretical and practical segments. In the theoretical segment, Prof. Shahnaz explained the fundamentals of umami and various umami ingredients frequently used in Egyptian cooking. For example, tomatoes produced in Egypt contains more umami than those produced in other countries, suggesting that Egyptians are far more familiar with the umami taste than they might realize. The participants experienced a comparative tasting of a low-salt vegetable soup and a similar soup with *AJI-NO-MOTO*[®] umami seasoning. Of 98% participants recognized that *AJI-NO-MOTO*[®] improve the taste of low-salt soup, and 80% said they preferred the soup with *AJI-NO-MOTO*[®].

■ Promasidor Holdings executive seminar

In November, 2016, Ajinomoto Co., Inc. signed an agreement to purchase a stake in Promasidor Holdings Limited, a major food processing manufacturer with operations in 36 African countries. The company is seeking to enrich local diets by promoting synergy benefits between Promasidor's solid business foundation in Africa and Ajinomoto's superior product development and manufacturing technology. To promote business together, it is vital that Promasidor staff develop an accurate understanding of umami and MSG. In March 2017, the company held lectures in Ghana for Promasidor's CEO and senior executives, followed by a lecture on umami and MSG in South Africa in May 2017 to some 50 Promasidor employees gathered from various African countries to attend the triennial Promasidor executive meeting.

The practical lecture used dried tomatoes and low-salt vegetable soup to enable all attendees to experience the feel of umami in their mouths. Promasidor employees deepened their understanding of umami and MSG by learning the origins of concerns over MSG safety and how various rumors spread around the world. Over the two-day meeting, the company shared information that could help with future product and operational development, such as seasonings and instant noodles, or possible products enriched with taste or flavor enhancers.



Prof. Shahnaz makes a speech at the seminar



Seminar participants comparing the taste of a low-salt vegetable soup with that of a similar soup flavored with umami seasoning *AJI-NO-MOTO*[®]



A seminar held for Promasidor employees



Dried tomatoes, cheese and vegetable soup used during the practical lecture on umami

Healthy and Comfortable Lifestyles Made Possible with AminoScience



Amino acids contributing to better health

Supporting health by unique products using amino acids

Amino acids are not only components of proteins, but also individual amino acids have various roles, and their contribution to health is clarified scientifically. Amino acids come in two basic categories: those the body cannot produce (essential amino acids), and those it can produce (non-essential amino acids). While it is necessary to take essential amino acids from the diet, it is sometimes difficult to take them every day. In such cases, nutrient functional foods and dietary supplements are useful for maintaining health.

The Ajinomoto Group has been researching amino acids for many years and has developed proprietary technologies and products to support people's everyday life and health.

Amino acids for supporting seniors' muscle building

In today's unprecedented aging society, it is imperative to build social structures for elderly people to enjoy dignified, independent and fulfilling lives. For improving quality of life for the elderly, it is important to extend healthy life expectancy, for which muscle maintenance plays a significant role.

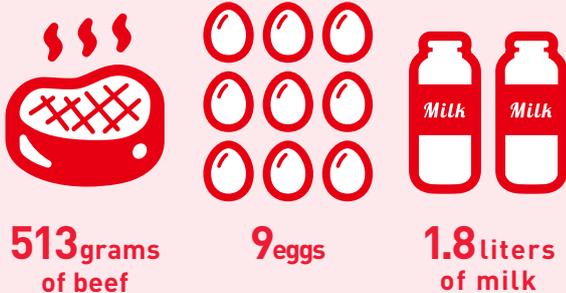
It is a serious issue for elderly people that their muscles gradually decline. While proper exercise and intake of proteins and amino acids are required, smaller diet of elderly people makes it harder to consume the necessary amount of proteins from food alone. Therefore, the Ajinomoto Group is supporting seniors' muscle strengthening by providing products using amino acids.

It has been reported that essential amino acids with 40% leucine, a proprietary formulation developed by Ajinomoto Co., Inc., used in conjunction with exercise that lightly loads the muscles, such as bending and extending legs, supports muscle development and improves walking ability of those over the age of 60.

Amino acids are the nutrients that form muscle. Among them, leucine which is one of essential amino acids has the function of signaling the body to create muscle. That's why essential amino acids with leucine content as high as 40% are good for muscle building. In addition, absorption of amino acids into the body more quickly than proteins leads to efficient muscle building.

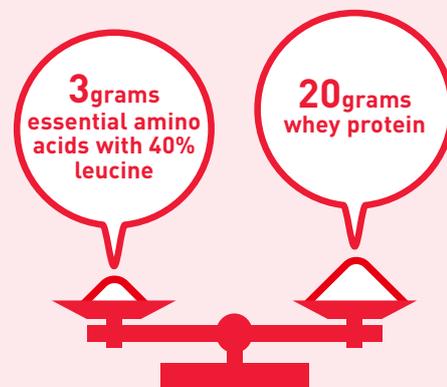
Amino Aile® and *Amino Aile*® *Jelly Leucine 40** "formulated to support muscle building in people in their 60s and over to maintain muscle and walking ability" are blended with 3000 mg of essential amino acids with 40% leucine. Those products are designed to assist senior generation in counteracting muscle loss with aging.

60 grams of protein, the recommended daily intake, is equivalent to...



The Dietary Reference Intakes for Japanese (2015) recommends around 60 grams as the daily protein intake for seniors (body weight 60 kg).

Essential amino acid formulation with 40% leucine has the same muscle-building power as whey protein, which is called the ideal protein.



Whey protein is called the ideal protein because it can make muscles efficiently. Research has shown that only three grams of essential amino acids with 40% leucine have the same muscle-building power as 20 grams of whey protein.

*Amino Aile® Jelly Leucine 40 is a rebranded version of Aminocare® Jelly Leucine 40.

Function of amino acids in everyday life

■ Amino acid intake made easier in daily meals

Dietary needs today in Japan are becoming increasingly complex and diverse across generations and family structures. One possible way to meet those needs and ensure an appropriate balance of amino acids is to add the functionality of amino acids to various foods. The Ajinomoto Group named these activities “Inside Strategy” for amino acids in food and is putting strong emphasis on this area.

In this strategy, the aim is to ensure an appropriate intake of necessary amino acids in meals and snacks by adding a pre-formulated mixture of amino acids to items that appear on the daily menu.

By infusing the concepts of health and nutrition into all products in this way, the Ajinomoto Group will seek to synthesize amino acids and food while contributing to an overall improvement in people’s dietary lifestyles through its products.

■ “Inside Strategy” for amino acids with food

- ◆ Creating new value of amino acids
- ◆ Providing new food processing technologies
- ◆ New merchandising to customers



■ Healthy lifestyles of Ajinomoto employees supported by amino acids

Ajinomoto Co., Inc. has begun providing amino acid-fortified menus in its cafeterias and at tea dispensers to support employee health.

■ Curry fortified with the blend of nine essential amino acids with high leucine content developed by Ajinomoto Co., Inc. was offered in cafeterias at the headquarters, Kawasaki Factory, and Tokai Factory



Employees enjoying meals with high-leucine essential amino acids



Meal offered at headquarters

■ Beverages fortified with the blend of nine essential amino acids with high leucine content in tea dispensers at Tokyo headquarters



TOPICS

Provision of correct information to consumers with Foods with Functional Claims

To help consumers in selecting products, the Ajinomoto Group provides foods with functional claims (FFCs) that are based on scientific evidence.



■ Glyna®

Helps rapidly induce deep sleep and enhances sleep quality, while supporting a more refreshing awakening

Reference

Press Release (Japanese)
https://www.ajinomoto.com/jp/presscenter/press/detail/2015_08_05_1.html



■ Amino Aile®

Essential amino acids with 40% leucine support muscle building in people in their 60s and over to maintain muscle and walking ability

Reference

Press Release (Japanese)
https://www.ajinomoto.com/jp/presscenter/press/detail/2016_02_23.html



■ Amino Aile® Jelly Leucine 40

Essential amino acids with 40% leucine support muscle building in people in their 60s and over to maintain muscle and walking ability

Reference

Press Release (Japanese)
https://www.ajinomoto.com/jp/presscenter/press/detail/2017_07_06_03.html



■ Mai Asa Histidine

Histidine supports reducing fatigue, a clear mind and efficient performance of tasks requiring simple memory and judgment

Reference

Press Release (Japanese)
https://www.ajinomoto.com/jp/presscenter/press/detail/2017_01_23.html

Nutritionally Balanced School Lunches for All Vietnamese Children Vietnam School Meal Project



The right food knowledge and know-how to tackle the problem

Vietnam and its children are suffering the double burden of malnutrition, with a lack of vital nutrients resulting in more children of stunting and low body weight in rural areas, and an expanding middle-income population in urban areas leading to an increase in overweight or obese children.

Many areas in Vietnam are still not able to offer children school meals, and the urban elementary schools that do provide lunch often have trouble creating nutritionally balanced menus. This stems from the lack of any national framework for dietitians, a lack of nutritional knowledge and awareness among school-lunch providers, teachers, and parents, the absence of any clear guidelines on school-lunch calorific intake, micronutrients, salt and sugar restrictions, and carbohydrate-protein-fat balance, and insufficient school-meal preparation facilities.

In 2012, Ajinomoto Vietnam Co., Ltd. launched its Vietnam School Meal Project, and has subsequently worked with central government ministries, including the Ministry of Education and Training and the Ministry of Health, as well as 63 local governments to provide nutritionally balanced school meals to children

nationwide.

The Vietnam School Meal Project aims to develop and distribute school-meal menu books and dietary-education materials, and to set up kitchen models across the nation to improve school-meal operations and hygiene management. The project has also been developing software for designing appropriate lunch menus. In December 2016, the Ministry of Education and Training published the software online and encouraged schools to register and use it. By the end of March 2017, the software was already in use in 1,022 schools across the country.

Managers from 61 regional sales depots and salespeople responsible for dining-out products of Ajinomoto Vietnam Co., Ltd. have been visiting elementary schools to explain how to use the menu-design software and how schools might introduce meals made with Ajinomoto Group products. The project will continue to pursue its target of offering nutritionally balanced school meals to 1.428 million children in 4,061 schools equipped with proper cooking facilities by 2019.

Project milestones

1. Standardize elementary school lunch menus in major cities
2. Develop kitchen models to improve school cooking facilities
3. Develop and distribute nationwide menu-design software with nutrients-calculation function



Teach children about nutrition and table manners using food-education materials created by Ajinomoto Vietnam Co., Ltd.



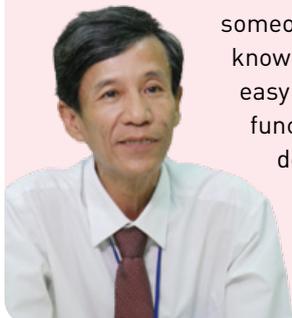
Standardize kitchen facilities based on Japanese hygiene management criteria. Introduce self-serve, self-clear lunch-tray service



Launch online menu-design software with various features for developing nutritionally balanced menus

VOICE How participants view the project

Our new school lunches are improving pupils' eating habits. Apparently, they are asking for more vegetables at home. The menu-design software is impressive even for someone like me with little knowledge of nutrition. It is easy to use, offers superior functionality, and helps you devise interesting new menu combinations.



Phan Van Tri
Principal, Trung Trao Elementary School

What do school mums think?

- My daughter was a fussy eater and didn't like vegetables or fish. Since the school started offering different daily menus, she has learned to eat anything. It's great. I've even made some of the school menus myself at home at my daughter's request!
- I always thought children should have more flesh on them when they were young so I fed my kids meat and didn't worry much about vegetables. My kids were fussy eaters, but since they started eating primary-school lunches, they eat everything they are given. They are much healthier and my own view has changed.

VOICE Consistent, diverse initiatives make nutritionally-balanced school meals more meaningful

Right from the outset, this project has focused on ensuring children and caregivers understand the importance of nutritionally-balanced school lunches. We believe that regularly educating students about food and its benefit before lunch and repeatedly explaining the project's underlying goals at parents' meetings are helping to broaden understanding across the country. We have received many good feedbacks from primary school teachers, caregivers and



Nguyen Van Trung
Deputy Division Manager, Corporate Division (GA and PR),
Ajinomoto Vietnam Co., Ltd.

parents deeply appreciating our efforts. More local media have started covering on the project as well. We continue to expand the project nationwide with an aim to contribute to improved nutritional status and healthy living of young generation in Vietnam.



Dietician training and qualification systems for sharing of accurate nutritional information

The Vietnam Nutrition System Establishment Project (VINEP)

The Japan-Vietnam VINEP project was launched in 2011, as an extension of the joint research on umami and nutritional issues conducted in 2009 by Vietnam's National Institute of Nutrition (NIN) and the Institute for Innovation of Ajinomoto Co., Inc. Through this project, the country's first dietician training course (nutrition bachelor course) was established at Hanoi Medical University. The Ajinomoto Group also works alongside the governments to provide regular nutrition-related workshops and educational activities with Japan Dietetic Association and contributed to determining the first legal occupational status of dieticians (job code) in Vietnam in 2015. Hanoi Medical University is producing the country's first qualified dieticians in August 2017. Going forward, the Group will continuously drive the project to establish more advanced systems to help those graduates use their learning and promote accurate nutritional understanding and alleviate nutritional issues.



Students in the nutrition bachelor course dialogued with nutritional experts from Japan in Hanoi (June 2017)



The first generation nutrition bachelor students graduated from Hanoi Medical University (August, 2017)

*Management of VINEP was transferred to The Ajinomoto Foundation in fiscal 2017

Reference

Community P138-140

Resolution of Food and Nutritional Issues Worldwide

Eradicate Malnutrition, Fight Poverty



Improved weaning nutrition to support children's future

The SDGs 2016 Report states that, in 2014, 158.6 million, or one in four children under the age of five were underdeveloped. Malnutrition is most severe in developing countries, and the international community needs to take urgent action to improve nutrition. The first 1,000 days from conception to a child's second birthday is the most vital in terms of nutrition. It is difficult for a child to recover from any malnutrition suffered during this period, resulting in stunting growth and impairing intellectual development.

Since 2009, the Ajinomoto Group has been promoting a project in Ghana designed to improve nutrition for weaning babies, working with a variety of partners, including local government, universities, international NGOs and other corporations, to develop, manufacture and retail *KOKO Plus* amino-acid supplements that improve the nutritional balance of weaning foods. The Group enlists local female entrepreneurs to retail the supple-

ments. The women make it their priority to communicate thoroughly with local people, and ensure they understand the importance of good nutritional balance and the role that *KOKO Plus* can play in achieving it. The Group also takes the opportunity to participate in local events and meetings and to appear on local radio or town broadcasts to advertise *KOKO Plus*, explain why it is necessary, and encourage consistent use.

In April 2017, The Ajinomoto Foundation, established by Ajinomoto Co., Inc., was certified as a public interest incorporated foundation. The company intends to transfer control of these initiatives and provide support to The Ajinomoto Foundation, and continuously develop social business and activities through food such as the Ghana Nutrition Improvement Project.

RUTF development project to benefit malnourished Malawi children

An estimated 16 million children under the age of five worldwide are said to suffer from severe acute malnutrition. Many of these children facing the risk of death live in developing countries in Africa and Asia. Since access to hospital-based treatment is limited in poor countries, community-based treatment that promotes the use of Ready-to-Use Therapeutic Foods (RUTF) together with breast milk is becoming more common.

Against this background, Ajinomoto Co., Inc. is developing a new RUTF in Malawi in collaboration with Valid Nutrition, an Ireland-based non-profit. The staple food in Africa is cereals but these often lack protein. The company has successfully developed a nutritionally effective RUTF by supplementing local grains with amino acids. Studies underway since October 2015 have ascertained that the product offers clear benefits in terms of

nutritional efficacy. The company is now looking to commercialize the project as part of its Ajinomoto Group Creating Shared Value (ASV) initiatives.



Samples of RUTF and a child having RUTF

The significance of corporate efforts to resolve malnutrition through social business

In February 2017, Ajinomoto Co., Inc. President and CEO Takaaki Nishii took part in a discussion with Muhammad Yunus, founder of the Grameen Bank. They used the Ghana Nutrition Improvement Project to explore the significance of nutritional improvement initiatives by food companies, and the use of social business models to achieve objectives.



Muhammad Yunus is an economist who founded Grameen Bank in Bangladesh in 1983. The bank's innovative strategy to counteract poverty by extending small uncollateralized loans, or microcredit, to impoverished people in rural areas attracted much attention. The Bank has also developed diverse social and other businesses, commonly referred to as the Grameen Family. Dr. Yunus was awarded the Nobel Peace Prize in 2006 in recognition of his achievements. Dr. Yunus who has been interested in the Ajinomoto Co., Inc. Ghana Nutrition Improvement Project from the outset, decided to take advantage of a trip to Japan to participate in the discussion.

On the day, CEO Nishii explained the significance of the Ghana project, its origins and progress to date, and expressed his desire to create a more efficient, effective and sustainable business model by building open innovation partnerships with diverse local stakeholders, including the government, NGOs, international organizations, and private companies. Dr. Yunus then tasted the *KOKO Plus* supplement, and offered an evaluation and some future expectations for the Ghana project.



Takaaki Nishii, President & CEO (left) and Yasuhiko Toride at Nutrition Improvement Dept. (right) from Ajinomoto Co., Inc.



Dr. Muhammad Yunus (right) and Ahmed Ashir Uddin, Associate Prof. of Kyushu Univ. Graduate School

Muhammad Yunus expert insight

Poverty is a fundamental human problem that we should not ignore. You cannot brush it aside by saying you don't know about it or are not interested because it is a very real problem. In fact, considering poverty will help you understand the issues facing the world today. It is a difficult issue, but not insurmountable. The question is: Are we motivated enough to resolve it?

I believe there are two main reasons why companies participate in social business. First, companies are seeking to find a new role for themselves in society. Second, companies are being severely criticized for focusing solely on generating profits. Private companies are starting to ask themselves what they can do to contribute to society and what specifically they have to offer.

The Ajinomoto Co., Inc. Ghana Nutrition Improvement Project is a very exciting and encouraging initiative. When a company turns its attention to improving nutrition, it can result in the forming of social businesses to help resolve the issues. The Ghana project can already call itself a social business, and so, while it is starting out on a small scale, it has the potential to grow significantly. Ajinomoto Co., Inc. has an established global business network so, having launched an operation in one country and expanded that business to a sustainable scale, it can then develop similar businesses in other countries. Such initiatives would not cost a great deal and it should not be difficult for the company to recoup any initial investment.

Recently, we have seen other global food companies starting to get involved in businesses that help improve nutrition of poor people and supply nutrients to nutritionally deprived children. Food loss could also be developed into a future social business. I have no doubt that companies like Ajinomoto Co., Inc. with a long history in the field of food, serve as an inspiration to other food product manufacturers by applying their expertise to make a significant social contribution.

Harmony with the Earth

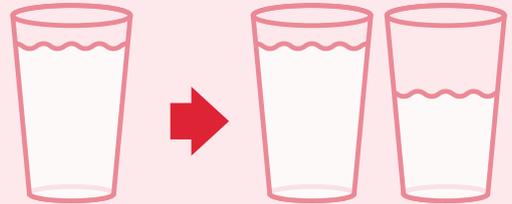
Global warming



Global average surface temperature by year 2100

Up to **+4.8°C**^[1]

Water

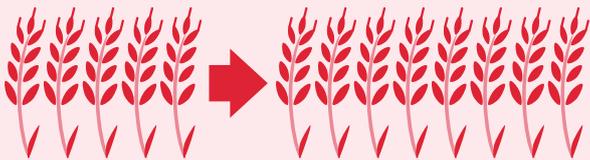


Global water demand by 2050 compared to 2000

+55%^[2]

The world today and future outlook

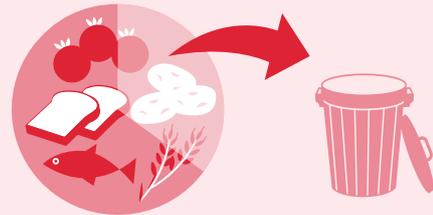
Food production



Food production needed by 2050 compared to 2005 through 2007

+60%^[3]

Food loss and waste



Amount of food loss and waste

Roughly 1/3^[3]
(approximately 1.3 billion tonnes)

[1] IPCC (2013) [2] OECD (2012) [3] FAO (2012)

■ Ajinomoto Group's aim

As the demand for human consumption has already exceeded the Earth's production capacity, sustainable production and consumption must be pursued to secure our daily lives and economic activities while keeping the global environment healthy.

In all activities, from the procurement stage at the most upstream part of the supply chain to development and production, logistics, and communication with consumers, the Ajinomoto Group acts in partnership with stakeholders while sharing common values and goals.

Closely linked SDGs



Ajinomoto Group Environmental Policies

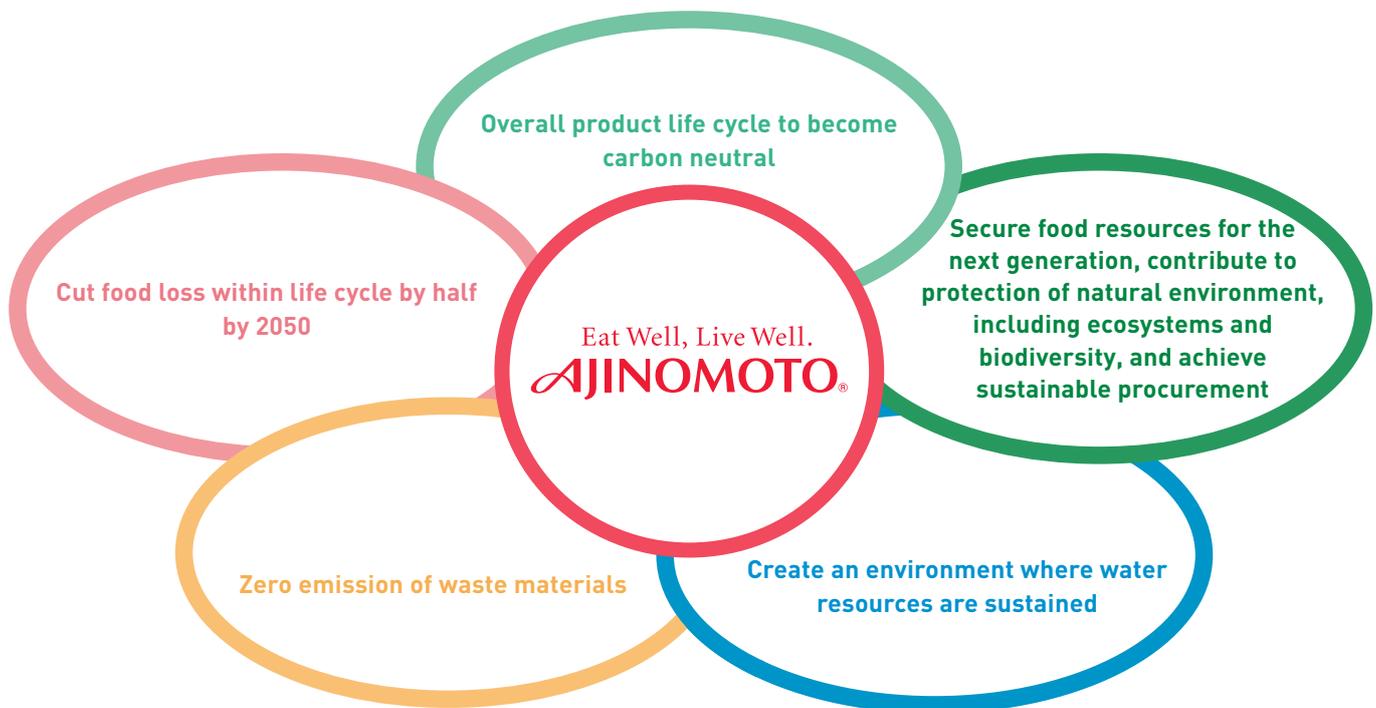
(revised in April 2017)

We work with the community and customers to contribute to harmonious coexistence with the Earth, in order to realize a sustainable "Recycling-Oriented Society".

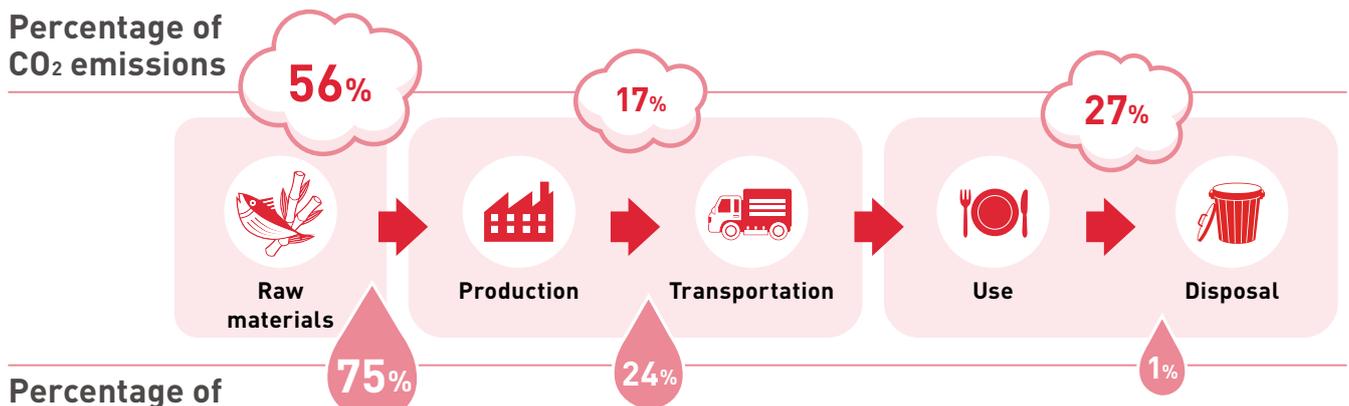
- 1 We contribute to the low-carbon society, by reducing the emissions of greenhouse gases generated over the entire life cycle of our products to the level that the Earth can absorb.
- 2 We contribute to the security of food resources, the conservation of natural environment including ecosystem and biodiversity, and the conservation of water resources for future generations.
- 3 We promote maximum use of resources, by practicing the 3R (Reduce, Reuse and Recycle) of wastes generated over the entire life cycle of our products in an appropriate manner.
- 4 We comply with applicable laws and regulations.
- 5 We strive to prevent environmental problems, as well as promote environmental improvement, under the Environmental Management System.

Ajinomoto Group Long-Term Environmental Vision

Together with communities and customers, the Ajinomoto Group contributes to the global environment through initiatives that are ahead of international targets, from manufacturing to consumption.



Ajinomoto Group's environmental impact by life cycle assessment



The percentage of CO₂ emissions are based on CO₂ emissions of Fiscal 2016 input and output balance shown online in the environmental data. The percentage of water use is calculated by Trucost based on primary raw materials, amount used in production, and transportation and storage scenarios.

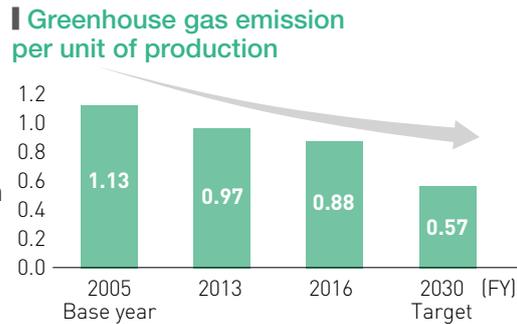
Ajinomoto Group Long-Term Environmental Vision: Environmental Targets

The Ajinomoto Group pursues long-term environmental targets that encompass the entire product life cycle. This includes not only reducing emissions from production but also cutting food loss and waste, improving security of food resources, and conserving the natural environment.

Overall product lifecycle to become carbon neutral



50% reduction
Greenhouse gas emission per unit of production (vs. fiscal 2005)



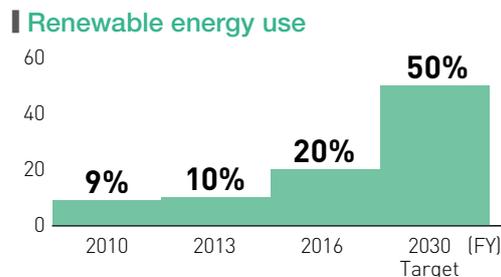
Key plans

- Continuous implementation of energy saving activities that are ongoing for more than 10 years
- Capacity increase and stable operation of own biomass boilers and cogeneration
- Promotion of renewable energy use

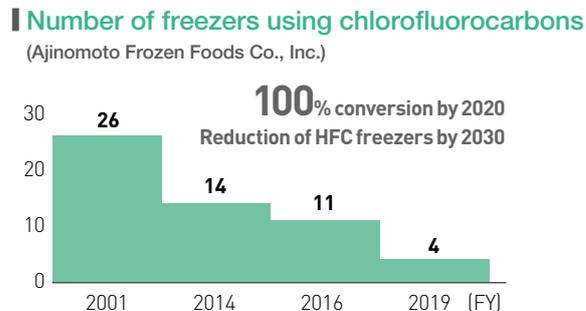


Bien Hoa Factory, Ajinomoto Vietnam Co., Ltd.

50%
Renewable energy use



100%
Use of natural or new refrigerants below GWP 150



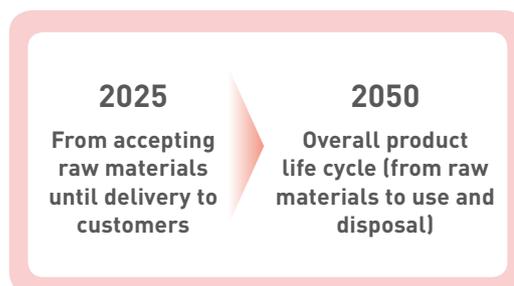
Key plans

- Formulation of policies to reduce chlorofluorocarbons
 - Elimination of chlorofluorocarbons at Ajinomoto Frozen Foods Co., Inc. and Knorr Foods Co., Ltd.
 - Installation of HFO refrigerators in Indonesia

Cut food loss within lifecycle by half by 2050



50% reduction
Food loss and waste



Key plans

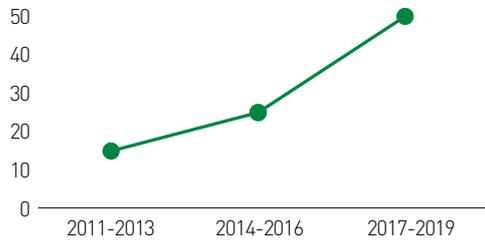
- Full use of raw materials in manufacturing process
- Reduction of distribution and product returns by extending best-before dates, changing labels to month-year form, and changing delivery rules
- Reduction of waste during product use by customers
- Proposal of eco-friendly lifestyles to consumers for enjoying food without leftovers

Secure food resources for the next generation, contribute to protection of natural environment, including ecosystems and biodiversity, and achieve sustainable procurement



6.0 billion yen
Estimated economic benefit

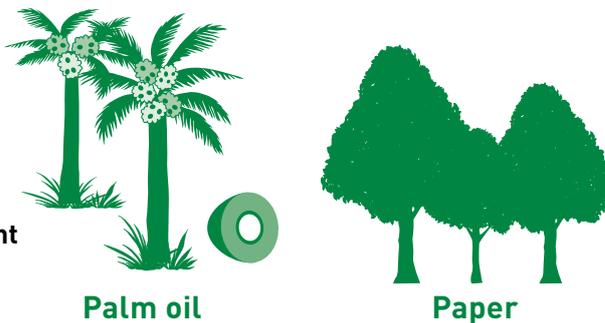
Number of resource-saving fermentation technologies introduced



Key plans

- Technologies that conserve raw materials and energy
- In-house production of raw materials for fermentation
- Biomass use

100%
Sustainable procurement (Fiscal 2020)



Key plans

- Establishment of traceability
- Procurement of certified or traceable raw materials
- Creation of sustainable procurement standards and framework with suppliers

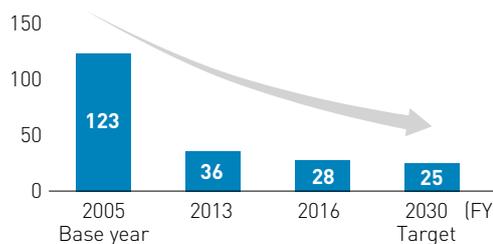
Create an environment where water resources are sustained



80% reduction

Water use per unit of production (vs. fiscal 2005)

Per-unit water use



Key plans

- Continuous implementation of energy saving activities that are ongoing for more than 10 years
- Setting of quality standards for water discharge (BOD, TN) (direct discharge into public areas)

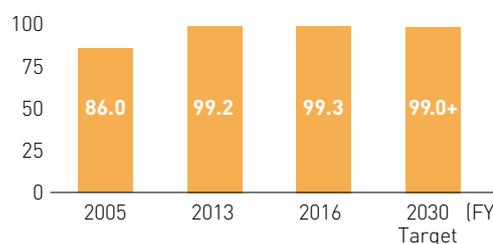
Zero emission of waste materials



Maintain at **99% or more**

Resource recovery ratio

Resource recovery ratio



Key plans

- Continuous implementation of energy saving activities that are ongoing for more than 10 years

Sustainable Agriculture and Renewable Energy



Production from the region's boons that returns the fruits to the region

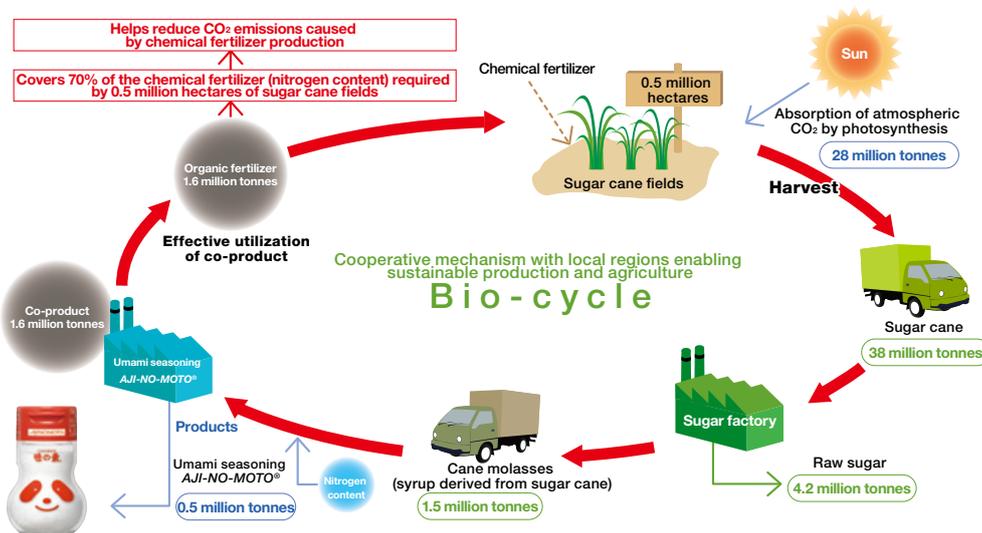
Since its founding, the Ajinomoto Group has produced amino acids from crops that are easily available in each region. Nearly 100% of the nutritionally rich by-products (co-products) that remain after extracting amino acids in the fermentation process are then used locally as fertilizer and feed. The Group considers such regional resource recycling processes, or “bio-cycles,” to be a solution that contributes to sustainable agriculture for food security worldwide.



Important agricultural raw materials in amino acid production: sugar cane



Using a co-product to cultivate rice



If fermentation were not used to make amino acids...

Assuming an annual production of 0.5 million tonnes of AJI-NO-MOTO®,

- 833 annual harvests^[1]**
If all were made from kombu kelp, 833 annual harvests of kelp in Japan, equivalent to 25 million tonnes in dry weight would be required.
- 200 million tonnes^[2]**
If all were made from tomatoes, 1.6 annual harvests of tomatoes worldwide, equivalent to 200 million tonnes would be required.

[1] Calculated based on the average extraction of glutamic acid of 2.24 grams per 100 grams of kombu kelp
[2] 0.14 gram per 100 grams of ripe tomatoes

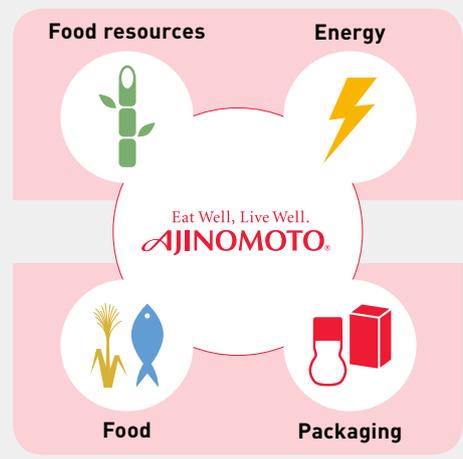
The chart assumes worldwide annual production of approximately 0.5 million tonnes of the umami seasoning AJI-NO-MOTO® by the Ajinomoto Group using only sugar cane. The values for sugar cane grown and sugar production are commonly used global figures, and the values for resources used for producing AJI-NO-MOTO® and values for co-products are based on actual statistics from the Ajinomoto Group.

Circular economy

A new proposition called the circular economy is currently spreading across Europe. This concept encompasses reduction of waste and disposal, recycling, sharing, and more, along with environmental conservation as a strategy for economic growth.

The Ajinomoto Group has been continuously engaged in various initiatives that make full use of energy and food resources without waste, such as bio-cycles. Through these initiatives, the Group takes pride in enriching local agriculture and economic activities in areas where it produces the ingredients required for its business growth.

However, the Group recognizes that there is still room for improvement to make consumer lifestyles more environmentally friendly. Although forming a complete cycle is difficult given the constraints, such as the legal system and organization, the Ajinomoto Group aims to be a hub for creating “circulation” for the whole society, in collaboration with every consumer.



Target 50% renewable energy use by 2030



Ayutthaya Factory, Ajinomoto Co., (Thailand) Ltd.



Green Power Certificate purchase agreement with Japan Natural Energy Co., Ltd.

The Ajinomoto Group aims to increase overall renewable energy use to 50% by fiscal 2030 by conserving energy, as well as increasing biomass boilers and biomass heat and power cogeneration systems mainly outside Japan. In fiscal 2016, the Ajinomoto Group achieved 20% renewable energy use by encouraging the use of non-edible and unused biomass such as sugar-cane bagasse and rice husks as energy sources in Brazil, Thailand, and Vietnam.

In April 2016, Ajinomoto Co., (Thailand) Ltd.'s Ayutthaya Factory introduced a rice-husk biomass cogeneration system. The factory has established an in-house framework for managing the entire system from procurement of rice husks, operation and maintenance of the cogeneration process, through recycling the leftover ashes as a co-product. Thanks to the new cogeneration system, the factory has reduced CO₂ emissions by 59,000 tonnes annually.

In Japan, where renewable energy use was comparatively low, the Ajinomoto Group has signed a contract with Japan Natural Energy Co., Ltd. to purchase Green Power Certificate to cover all electricity consumed at Ajinomoto Co., Inc. headquarters and its domestic sales offices. Under the certificate, all electricity is considered to be generated from sugar-cane bagasse biomass from sugar factories in Okinawa Prefecture. As a result, all electric power consumed in Group target bases shifted to green power from fiscal 2017 onwards.

Ajinomoto Co., Inc. headquarters, Ajinomoto training center, five sales offices in Japan, Hokkaido Ajinomoto Co., Inc., Okinawa Ajinomoto Co., Inc. Annual electricity consumption: 4.10 million kWh (equivalent to 2,400 tonnes of CO₂ emissions)



Introduction of Charcoal Soil Amendment (DST) made from used activated carbon from amino acid production

In *AJI-NO-MOTO*[®] production, activated carbon is used in the final process of removing color and impurities. For many years, the used activated carbon was discarded as industrial waste. From its recent discovery of the function of activated carbon for agricultural use, in 2012 Ajinomoto Co., Inc. developed and launched the new agricultural product Charcoal Soil Amendment (DST-P), using used activated carbon from the Kawasaki Factory as raw material.

In Japan, bamboo charcoal has long been applied as a soil amendment. It is also known that cultivation of a single crop in a given area for many years can lead to soil degradation. Recent studies have shown that charcoal, including activated carbon, possesses the potential to improve soil quality. Charcoal is now being utilized around the world to reclaim farmlands.

Due to its characteristically high amino acid content, Charcoal

Improvement of plant growth of komatsuna, Japanese mustard spinach, by application of Charcoal Soil Amendment



Farmland with irregular growth due to salt accumulation



Before cultivation, Charcoal Soil Amendment was applied together with basal fertilizers



Plant growth was restored

Soil Amendment (DST-P) has become popular among Japanese farmers. However, comments from customers have revealed some problems to be solved: high moisture content making it difficult to spread, a noticeable ammonia odor, etc. Since *AJI-NO-MOTO*[®] production at the Kawasaki Factory ended in 2015, the location of Charcoal Soil Amendment production was transferred to Ajinomoto Vietnam Co., Ltd. Using used activated carbon from the Vietnam factory, a new, granulated Charcoal Soil Amendment was developed in order to respond to customer requests. The new product, Granular Charcoal Soil Amendment (DST-G), which is easy to spread and has less ammonia odor, was commercialized in March 2017.

Customers have expressed satisfaction with Granular Charcoal Soil Amendment. To expand the effective use of used activated carbon as Granular Charcoal Soil Amendment to other *AJI-NO-MOTO*[®] factories around the world, we are now collecting data on its practical application.



Production without waste: Resource-saving fermentation technologies

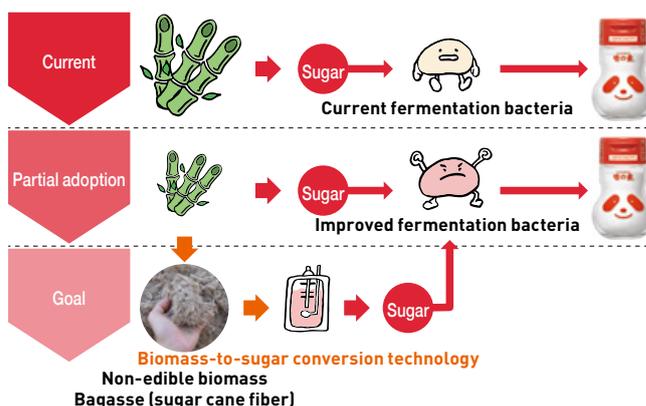
What are resource-saving fermentation technologies?

Demand for the crops used in amino acid production is rising as they are important food resources and also used as biofuels and industrial materials. As a global amino acid producer, the Ajinomoto Group has a social responsibility to developing lower-impact production methods.

Leveraging its advanced proprietary biotechnologies, the Ajinomoto Group has been actively working over the years to develop efficient “resource-saving fermentation technologies.”

Two examples of resource-saving fermentation technologies are those that reduce raw materials and energy use by enhancing bacterial productivity, and those that employ rice husks, wood chips, and other unused local biomass as energy sources. These technologies help secure food resources while reducing water use and carbon emissions in procurement and production. The Ajinomoto Group also aims to apply technologies that make use of non-edible biomass such as bagasse and corn stalks without competing with food resources.

To accelerate R&D and further improve these technologies, the Ajinomoto Group is partnering with various entities with cutting-edge technologies in Japan and abroad, including venture companies, universities, and research institutes.



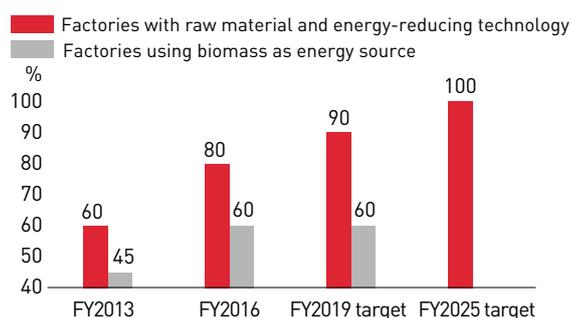
Technology roadmap

Around 80% of amino acid production factories slated for introduction of resource-saving fermentation technologies have introduced raw materials and energy-reducing technologies as of the end of fiscal 2016. The Group aims to complete technology introduction at all target factories by fiscal 2025, beyond which it will continue new technology development and deployment. The Group also plans to introduce technology for on-site production of ammonia, an auxiliary material, at some factories by 2025.

Around 60% of factories use biomass as of the end of fiscal 2016. The Group will continue to shift to cogeneration systems^[1] and increase this number in the years to fiscal 2025.

[1] Systems that generate and supply electricity and heat simultaneously.

Factories using resource-saving fermentation technologies



Application in production of feed-use tryptophan

Ajinomoto Animal Nutrition Group, which manufactures feed-use amino acids, has been introducing resource-saving fermentation technologies and other innovative production technologies at its existing factories. Now, in fiscal 2017 in the U.S., it will begin producing feed-use tryptophan using a new technology that further enhances these resource-saving fermentation technologies while enabling a smaller environmental footprint through reduced raw materials and fuels. By producing feed-use tryptophan in North America for the first time, it will seek to further stabilize its production system while contributing to growth in the North American livestock industry.

As it continues to develop cutting-edge amino acid fermentation technologies and conducting regionally based sales activities, the Ajinomoto Group will continue to provide its customers with valuable products and services as a leading feed-use amino acids company.



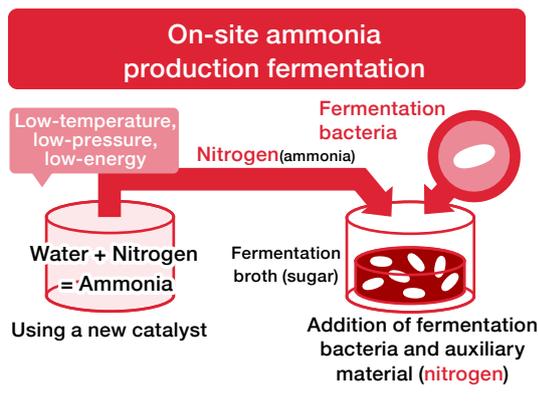
Ajinomoto Heartland, Inc. Eddyville Factory

Toward on-site production of ammonia, auxiliary material in amino acid fermentation

Ammonia is a key source of nitrogen, an element essential to all life on Earth. Over 160 million tonnes of ammonia are produced annually worldwide. Roughly 80% is used as raw material for fertilizers, and the remaining 20% for a variety of food, pharmaceutical, and chemical products.

The conventional method of synthesizing ammonia is over a century old and has various drawbacks. The method, which uses atmospheric nitrogen and hydrogen^[2] from natural gas, requires high-temperature, high-pressure conditions. Production is thus undertaken at centralized, large-scale factories that entail substantial energy inputs and capital investment. Transporting the ammonia to markets worldwide necessitates specialized transport equipment and storage facilities, resulting in considerable logistics costs.

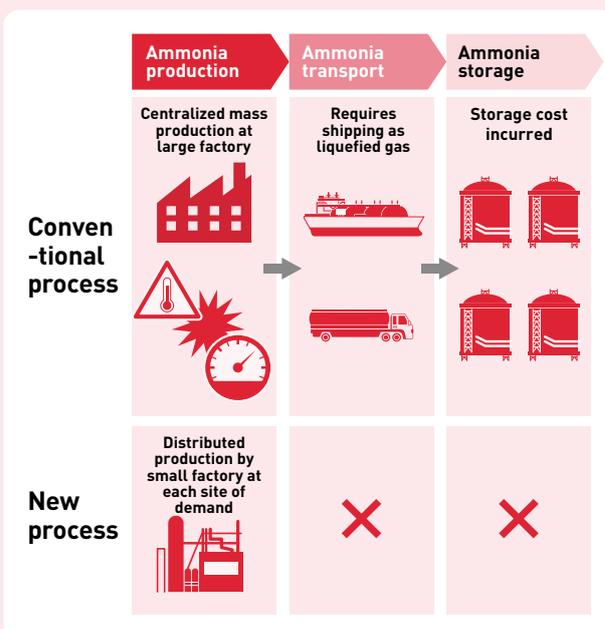
[2] Hydrogen, the most abundant element in the universe, has received attention in recent years as a source of clean energy; for example, as fuel for fuel cell vehicles.



In April 2017, Ajinomoto Co., Inc. joined Universal Materials Incubator Co., Ltd. (UMI) and Prof. Hosono's group in establishing Tsubame BHB Co., Ltd., a new company that will introduce these technologies at Ajinomoto's fermentation material factories worldwide to achieve the world's first on-site ammonia production by around 2021. The goal is to make ammonia production and transport more sustainable through reduced energy use and environmental impacts. Ajinomoto Co., Inc. will also look to raise the cost-competitiveness of fermentation materials with these technologies and, eventually, expand their application to agricultural fertilizers and other areas, thereby realizing more eco-friendly production systems.

Tsubame BHB Co., Ltd.

New company started based on capital investments from Ajinomoto Co., Inc.; UMI 1 Limited Partnership, managed and operated by Universal Materials Incubator Co., Ltd.; and the research group of Hideo Hosono, Director, Tokyo Institute of Technology Materials Research Center for Element Strategy



To address these issues, Professor Hideo Hosono of the Tokyo Institute of Technology, discovered and invented a catalyst that enables efficient ammonia synthesis under low-temperature, low-pressure conditions. This has made it possible to produce ammonia even in small-scale factories, raising anticipation of a volume-adaptable on-site ammonia production model.

Ajinomoto Co., Inc. uses large volumes of ammonia to produce various types of amino acids. The company has long been captivated by the technologies invented and developed by Prof. Hosono's group, and has been involved in joint development targeting their practical application.



From left: Yoshimasa Goto, Executive Director, Japan Science and Technology Agency (JST); Hideo Nakatani, CEO, Tsubame BHB Co., Ltd.; Seiichi Tsukioka, CEO, Universal Materials Incubator Co., Ltd.; Hideo Hosono, Director, Tokyo Institute of Technology Materials Research Center for Element Strategy; Takaaki Nishii, CEO, Ajinomoto Co., Inc.; and Yoshinao Mishima, President, Tokyo Institute of Technology

Reference

Press release

https://www.ajinomoto.com/en/presscenter/press/detail/g2017_04_27_02.html

A Solution to Animal Nutrition and Environmental Issues : Feed-use Amino Acids



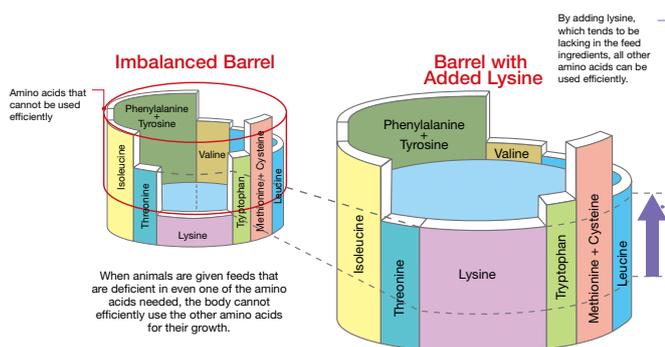
The demand for meat is expected to increase further as developing countries experience economic growth and global population rises. Crops such as wheat and corn are used as feeds for livestock while also being used as food for humans. The body of animals contains 20 different amino acids, several of which cannot be synthesized internally in sufficient quantities. Typical feeds for raising livestock animals are composed of corn, wheat or soybean meal to meet the requirements of these amino acids.

However, these feedstuffs tend to contain inadequate amounts of some essential amino acids such as lysine, threonine, and tryptophan. The imbalanced composition of amino acids leads to their inefficient absorption in the body and increased excretion of nitrogen compounds. These compounds are oxidized or reduced in the soil or air and released into the atmosphere as a greenhouse gas, nitrous oxide (N₂O), a cause of global warming. Raising crops and livestock animals also require enormous amounts of water.

Animal husbandry is thus closely linked to various environmental impacts.

With the development and sales of feed-use amino acids, the Ajinomoto Group aims to improve the amino acid balance of feeds for faster growth and higher productivity of animals while reducing the environmental impact of livestock production. The use of feed-use amino acids is expected to reduce the amount of crops used for feed, lower nitrogen excretion from livestock animals, and consequently decrease the emissions of greenhouse gasses.

The Group is conducting various ways of identifying the environmental benefits of feed-use amino acids using life cycle assessment (LCA). The Ajinomoto Group will continue to provide the people in the livestock industry with the information regarding the benefits of reducing greenhouse gases, and promote the effective use of feed-use amino acids in collaboration with industry groups and academic authorities.



Reference

The Environment P103

Cooperation with partners to promote feed-use amino acids

Research on reducing environmental impact of livestock together with farmers

The Department of Animal Science of the University of California, Davis (UC Davis) is a premier research institution recognized worldwide. Ajinomoto Heartland, Inc. supports its research by donations and supplying amino acids such as *AjiPro*[®]-L, a rumen-protected lysine for dairy cattle. Dr. Kebreab from the Department spoke of the significance of their research and its future outlook.

University studies respond to the needs of local livestock producers.

There is a growing social concern about the environmental burden of dairy farming. California in particular is coming up with stricter regulations on greenhouse gas emissions from farming year after year.

As regulators recently mandate for the reduction of greenhouse gas emissions from the state by 15% by 2020, quantification of the emission has become important. Therefore, the dairy producers made donations to form the California Dairy Research Foundation, which now funds our research. The producers are very interested in global sustainability and have high expectations that our research will suggest what they need to do to reduce emissions in the life cycle of dairy farming.

Calculating the amino acid utilization efficiency of ruminants such as cattle requires not only to consider digestion and metabolism but also to take into account amino acid utilization by rumen microbes. To that end, we developed a model that predicts how much protein (= nitrogen) in the feed is excreted and how the protein utilization efficiency is affected when the amino acids in the feed are balanced.

We are currently validating the model for actual application to dairy cattle.

The research originated from California contributes to the world

Our laboratory focuses on studying the agricultural carbon footprint and the requirements and usage of nutrients by livestock animals. UC Davis has



Ajinomoto Heartland, Inc.
Animal Nutrition Innovation Center of Chicago
Then-Senior Director

Izuru Shinzato (right)



Professor, Sesnon Endowed Chair, Deputy Director – Agricultural Sustainability Institute
Dept. of Animal Science, University of California, Davis

Ermiyas Kebreab, Ph.D.

world-leading state-of-art experimental facilities. I believe our pioneering research will help realize the sustainable, environmental-friendly dairy production practices.

AjiPro[®]-L, a rumen-protected lysine for dairy cattle manufactured by Ajinomoto, is not degraded in the rumen of cows but is digested and absorbed in the small intestine. Using this product allowed us to accurately measure and calculate how effectively amino acids are actually used in the body of dairy cows.

AjiPro[®]-L will certainly be helpful in improving our model in the future. Nowadays, a typical dairy ration contains 17 to 18% of crude protein provided from feedstuffs. To lower these levels, we are investigating whether there are insufficient amino acids aside from lysine and methionine, or if we can further reduce crude protein without compromising milk production by supplementing with the insufficient amino acids.

To date, a mathematical model has been established that can indicate how much the protein in the feed can be reduced when amino acids are balanced and, as a result, predict the amount of reduction of excreted nitrogen. The next step is to validate whether a degree of reduction in nitrogen excretion predicted by the model can be observed through experiments with dairy cows. Using trusted amino acid products is essential for the validation, and the collaboration with Ajinomoto Heartland, Inc. has given us a huge advantage.

I am sure that this research which began in California will eventually spread throughout the country and the world, and will enable the dairy farming to lower their environmental impact even more.

Environmental Impact Reduction throughout Society



Industry-wide initiatives for a sustainable logistics system

■ Organization for realizing "competition on products, cooperation on logistics"

Food logistics in Japan faces many challenges, including a shortage of truck drivers, rising distribution costs, and environmental issues such as the need to reduce CO₂ emissions. The Ajinomoto Co., Inc. reached an agreement in February 2015 to establish the "F-LINE[®]"^[1] food company distribution platform composed of six Japanese food manufacturers. These manufacturers organizing the F-LINE project created a distribution strategy which has so far rebuilt the medium-distance trunk line transport between the Kanto and Kansai regions in March 2016, and introduced cooperative distribution in the Hokkaido area in April 2016.

In an effort to further collaborate, four companies (Ajinomoto Co., Inc., Kagome Co., Ltd., Nisshin Foods Inc., and House Foods Group Inc.) formed the joint venture F-LINE CORPORATION in March 2017 and KYUSHU F-LINE CORPORATION in April 2017, which aim for greater efficiency in the logistics system by integrating the logistics planning function and sharing distribution assets such as truck drivers and distribution centers. Following the Hokkaido area initiative, the project aims to set up a cooperative distribution system in the Kyushu area in 2018, and will start discussing the possibility of nationwide deployment by merging with logistics subsidiaries in 2019.

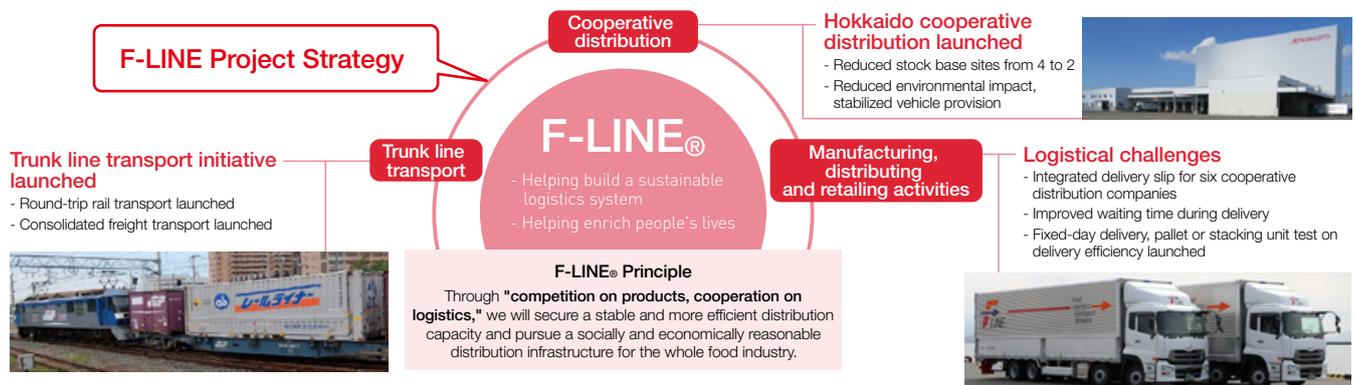
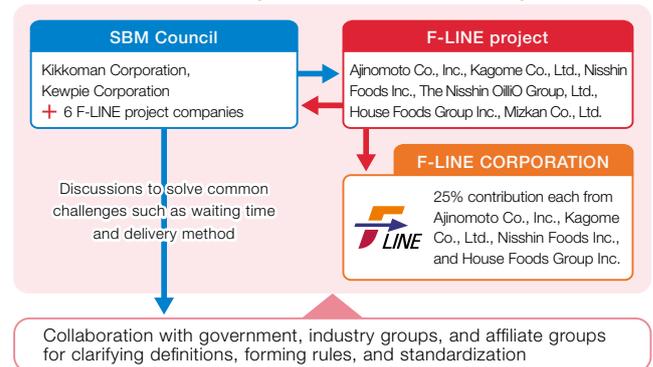
[1] Food Logistics Intelligent Network

■ Collaboration for sharing challenges and standardizing logistics

The SBM Council, a council for advancing the future of food logistics, was established by eight companies, with the addition of Kikkoman Corporation and Kewpie Corporation to the six companies in F-LINE project, to solve the logistical challenges involved in manufacturing, distributing and retailing, and create sustainable logistics for food products.

Moving forward, Ajinomoto Co., Inc. will continue working toward solving these challenges in collaboration with governmental and industrial organizations.

Sustainable food products distribution platform



■ Major accomplishments

F-LINE project cooperative distribution in Hokkaido

Ajinomoto Co., Inc.'s modal shift percentage



MLIT Minister's Award
under the 2016 Excellent Green Logistics Commendation Program

(by METI, MLIT, Japan Association for Logistics and Transport, and Japan Institute of Logistics Systems)

Reduction of food loss in society



At the Eco-Friendly Eating KIDs Prize award ceremony



Children try Eco-Uma® cooking

■ Best-before date to be changed to month-year label by fiscal 2019

Food loss is a global issue that is estimated to reach around 1.3 billion tonnes annually worldwide. The estimate for Japan is about 6.21 million tonnes, which is equivalent to about twice the amount of global food aid (approximately 3.2 million tonnes). As it is linked to environmental problems such as climate change and future food security, the reduction of food loss is an urgent issue that needs to be addressed globally. In Japan, it should also be approached comprehensively by both public and private sectors.

Since 2011, Ajinomoto Co., Inc. has been a member of the Japanese government's council and working group to study changing the best-before date label to month-year, extending best-before dates, and optimizing delivery dates. As a leading food manufacturer, Ajinomoto Co., Inc. started investigation in February 2017 to extend the best-before dates and change the labeling to month-year for products with expiration dates of more than one year.

The company is preparing for these initiatives by changing the labeling machine and other production processes, revising the information system from production until shipping, re-registering product information for logistics, among others. Labels for home use products are scheduled for conversion in stages until the end of fiscal 2019. The Ajinomoto Group is implementing the reduction of food loss in collaboration with the larger society.

Advantages of changing the best-before date label to month-year for the entire supply chain

- Reduction of controlled lots
- Minimization of storage space
- Simplification of warehouse and store operations

Reference

Consumer Issues P127

Best-before date label changed to month-year

■ Unique technology to address food loss through products

Okome Fukkura Choriryo uses Ajinomoto Co., Inc.'s enzyme technology to retain the texture of freshly cooked rice for a long period of time; *Kara-Age/Oniku Juicy Choriryo* uses the company's unique formula to retain the flavor of deep-fried chicken and other meat dishes even after cooling and increase yield by about 10%. The Ajinomoto Group contributes to reducing food loss for the food service and home meal replacement industries through its products.



Reference

Sustainability Data Book 2016, Special Feature 2 P10

■ Green living together with consumers

In Japan, food loss from households accounts for around half of all 3 million tonnes. Ajinomoto Co., Inc. proposes environmental practices as an eco-friendly food lifestyle that begins at the dining table, which can be practiced in everyday dishes and meals. The company is implementing initiatives to spread "Eco-Uma Recipe" (environmentally friendly, delicious and smart ideas) for enjoying delicious food without wasting ingredients, and to label and promote eco-friendly products with its original *Aji-na Eco* mark.

Through the Ajinomoto Eco-Friendly Eating KIDs Prize^[2], which supports eco-friendly food activities of children since fiscal 2010, and a hands-on environmental program held during summer vacation in partnership with Kao Corporation and Kawasaki City since fiscal 2016, the company will continue to encourage environmentally friendly lifestyles throughout society.



Kids Design Award 2017
Designs that develop children's creativity and shape their future (by Kids Design Association)



[2] Ajinomoto Co., Inc. has awarded the Ajinomoto Eco-Friendly Eating KIDs Prize to youngsters whose entry in the "Green Lane" environmental diary contest conducted by Green Cross Japan features outstanding environmentally responsible activities related to food.

Reference

Consumer Issues P133-136

Sustainable Lifestyles, Starting with the Dining Table

Sustainable Procurement in Collaboration with the Larger Society



The environmental and social impact of raw material procurement on the natural capital of biological resources, and the ecosystem and local communities which nurture them, is huge. To assure sustainable procurement, the Ajinomoto Group must ensure that the raw materials procured and used by the Group are free from environmental and social problems. It is also important for the Group to make procurement and use of sustainable raw materials stable and the norm for society as a whole. The Group is actively involved in creating social frameworks for sustainable production, supply and value chains, and is taking a lead in collaborative initiatives with various stakeholders.

Zero net deforestation

Deforestation brings about the destruction of ecosystems and loss of biodiversity, leading to social problems such as climate change and human rights issues. The Ajinomoto Group commits to zero net deforestation, working on procuring and using sustainable paper and palm oil throughout the Group.

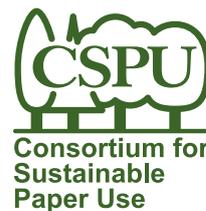
FSC®-certified paper use

In accordance with the Guidelines for Procurement of Environmentally Responsible Paper, the Ajinomoto Group makes efforts appropriate for each country and region to acquire sustainable sources for all office paper and container and packaging paper it uses worldwide. Policy 1 of the Guidelines stipulates the preferential procurement of FSC®-certified paper and 100% recycled paper.

In Japan, the Ajinomoto Group has virtually maintained compliance to Policy 1 for office paper. Since fiscal 2015, the Group has stepped up efforts to utilize FSC®-certified paper in containers and packaging. Following the introduction of FSC®-certified packaging materials for gift set boxes in the 2016 year-end gift season, the Group will adopt FSC®-certified paper for individual packaging of major household products such as *HON-DASHI*® and *Cook Do*® *Kyo-no Ohzara*® in the fall of 2017, which will carry the certification mark. The Group recognizes the potentially large role of its major products in raising public

awareness of sustainable paper.

Ajinomoto Co., Inc. is a founding member of the Consortium for Sustainable Paper Use (CSPU), established by WWF Japan and corporations to promote sustainable paper use. Along with holding symposiums and stakeholder dialogues, the consortium implements initiatives for FSC®-certified paper use. The Group believes that collaboration between corporate members by leveraging their position and influence in society would give a significant boost to reasonable procurement and use of sustainable paper.



Web →

WWF website (Japanese)

http://www.wwf.or.jp/corp/upfiles/20131119pcm_br.pdf

Reference →

Fair Operating Practices P61

Sustainable paper



With member of CSPU

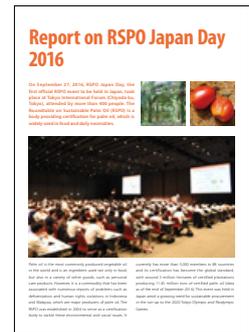
■ Efforts to solve sustainable palm oil procurement issues

Along with paper and pulp, palm oil procurement is a critical area for zero net deforestation efforts. As a member of the Roundtable on Sustainable Palm Oil (RSPO),^[1] the Ajinomoto Group is working on procuring and using sustainable palm oil, establishing a supply chain, and raising social awareness worldwide. With a common goal of switching raw material use to sustainable palm oil, the Group is working toward the adoption of sustainable palm oil such as RSPO-certified oil, setting achievement targets by fiscal 2020, in light of the fact that the possibilities for procuring sustainable palm oil greatly differ depending on the country or region and the materials used.

In Japan, the importance of sustainable palm oil use is not widely known in industrial circles and society, and awareness is still low. The Ajinomoto Group is thus taking the lead in creating a society-wide framework across industries that is not possible with the Group alone by collaborating with NGOs and civic-minded companies actively engaged in adopting sustainable palm oil.



Check progress at www.rsपो.org



[1] In March 2017, RSPO adopted a Group Membership system that requires registration of all subsidiaries and affiliate companies of the group involved in palm oil to the membership of the parent company. This system aims to address the risk that, while sustainable palm oil is a common global issue, corporate groups might confine their efforts to a limited range of business activities. The Ajinomoto Group complied with the intent of the system as part of its efforts to promote the Ajinomoto Group Creating Shared Value (ASV) initiative throughout the Group.

Reference

Fair Operating Practices P62
Sustainable palm oil

Skipjack ecological studies to increase sustainability of fisheries stock

Skipjack is a fishery resource of people around the world, and an important element of Japanese food culture being used as an ingredient in HON-DASHI®. There are growing concerns over the sustainability of skipjack fisheries in the waters around Japan as the establishment of international rules for skipjack resource management in the main fishing grounds (western and central Pacific) remain inadequate. The cooperation of diverse stakeholders is important more than ever to develop a framework for sustainable skipjack fishery and stock use globally. The Joint Skipjack Tagging Survey off the Pacific Coast of Japan launched by Ajinomoto Co., Inc. in 2009 is being widely implemented as one of its best practices.

■ Survey range expanded, from Taiwan to the Ryukyu Islands of Japan

Ajinomoto Co., Inc. has partnered with the National Research Institute of Far Seas Fisheries (NRIFSF) in an unprecedented joint stock research effort^[2] since 2009.

The large-scale tag-and-release survey conducted from 2012 to 2016 using archival electronic tags off the westernmost Yonaguni Island in Japan brought many new findings on skipjack migration throughout the waters of the Ryukyu Islands. A significant achievement is the estimation of skipjack migratory routes in the waters around Japan. To further understand its behavioral ecology from subtropical waters to the coastal waters of Japan, the study had to be extended to the seas beyond Japanese territorial waters and upstream of the Kuroshio Current in Taiwanese waters.

Beginning in 2016, a collaboration was developed with Taiwan Fisheries Agency and other stakeholders in Taiwan for recovering and reporting of tagged fish.^[3] In 2017, the Japan and Taiwan team jointly launched a tag-and-release survey off the coast of Chenggong Township, Taitung County. International cooperation is supported by the accomplishments and trust built up by the efforts on skipjack ecological studies over the years.

[2] For jointly conducting basic scientific research by a fisheries-related national research institute and a private corporation not directly involved with fishing or fisheries for the long-term public benefit of sustainable fishery stock. See the Sustainability Data Book 2016 for past accomplishments.

[3] A system was established and operated in Taiwan to ensure that tagged fish released in Japan and recovered in Taiwan are reported back to Japan.



(Top) The flag of cooperation between the Taiwanese Eastern Marine Biology Research Center and Ajinomoto Co., Inc.
(Bottom) With members of Taiwan Overseas Fisheries Development Council (OFDC)



Releasing a tagged skipjack for the ecological studies



Members of the skipjack ecological studies

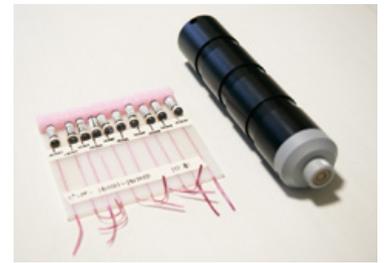
■ Skipjack coastal water ecological study using the latest technology

Since 2015, Ajinomoto Co., Inc. has adopted the latest technology on biotelemetry^[1], using "pingers" (ultrasonic markers that transmit data) in cooperation with the Tokyo University of Marine Science and Technology. This technology boosts the efficiency of acquiring data since detailed behavioral data such as swimming depths can be obtained without the need for catching the tagged fish. In 2016, researchers developed onboard receivers for fishing vessels operating in the open seas. Information from shipboard receivers is immediately transmitted via mobile network data transmission, allowing researchers to obtain its detailed behavioral ecology in real time without setting out to the open seas. A globally advanced constant monitoring system using a network of receivers^[2] off the coast of Yonaguni Island is currently being operated with the cooperation of the Yonaguni Town Fishery Cooperative. Aiming to build a wider network along the Kuroshio Current from the off the coast of Taiwan and Japan's Ryukyu Islands to the seas around Kochi, the company is carrying on discussions with diverse stakeholders from local fishermen to government and research institutions.

The pinger receiver network could be a common fisheries infrastructure that powerfully supports local resource conservation and management and productive operations. However, the cooperation of stakeholders with various interests is indispensable to building this network infrastructure.

Development of advanced technologies also progress when they are given a chance to show proof of concept. To this end, a CREST research team with Tokyo University of Marine Science and Technology joined the study from 2017.

In this manner, the Joint Skipjack Tagging Survey has become a platform for building cooperation between various stakeholders and connecting leading-edge technology to public benefit. Ajinomoto Co., Inc. is serving as a hub for the wider society in initiatives that increase the sustainability of fishery stock and fishing industries locally and globally.

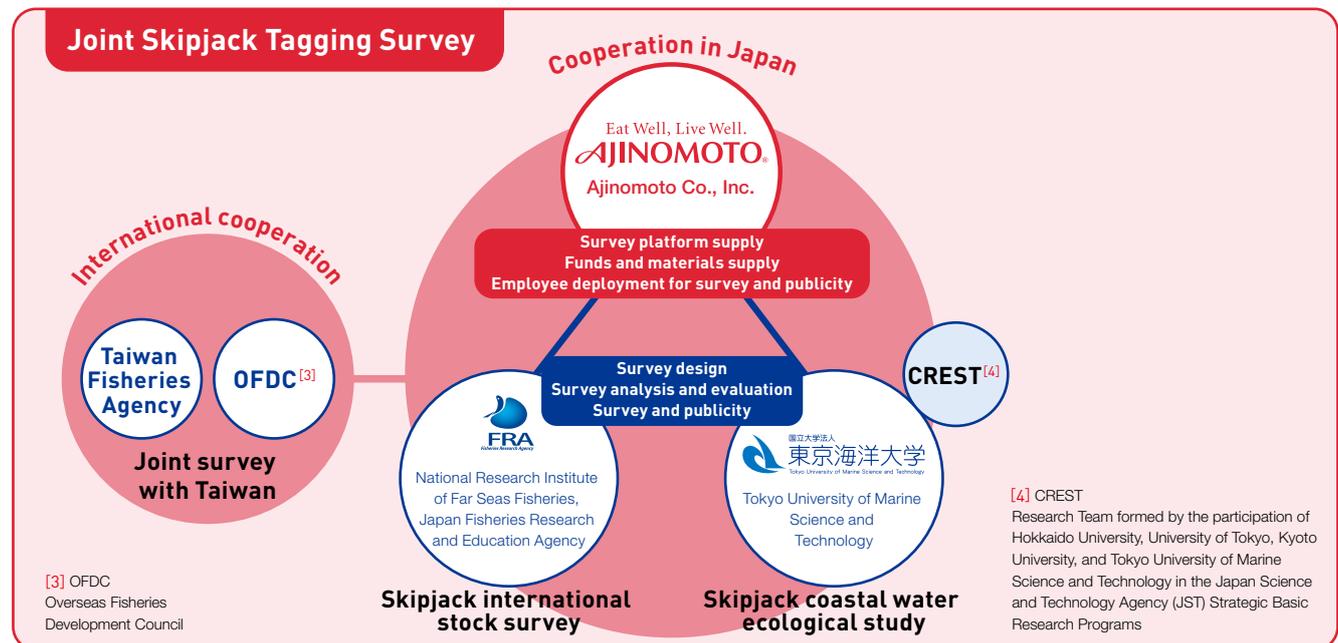


Pinger ultrasonic tag and receiver

[1] Technology for remotely monitoring wildlife behavior

[2] Five anchored fish aggregating devices and five fishing vessels with onboard receivers

■ Collaboration for sustainable skipjack



Ajinomoto Group partnerships for solving social issues

Top ten global companies not only boast a solid financial platform that supports operations on a global scale and generates highly efficient profits, but also possess an ability to create unique value. They constitute an essential part of countries or regions where they address social issues through business.

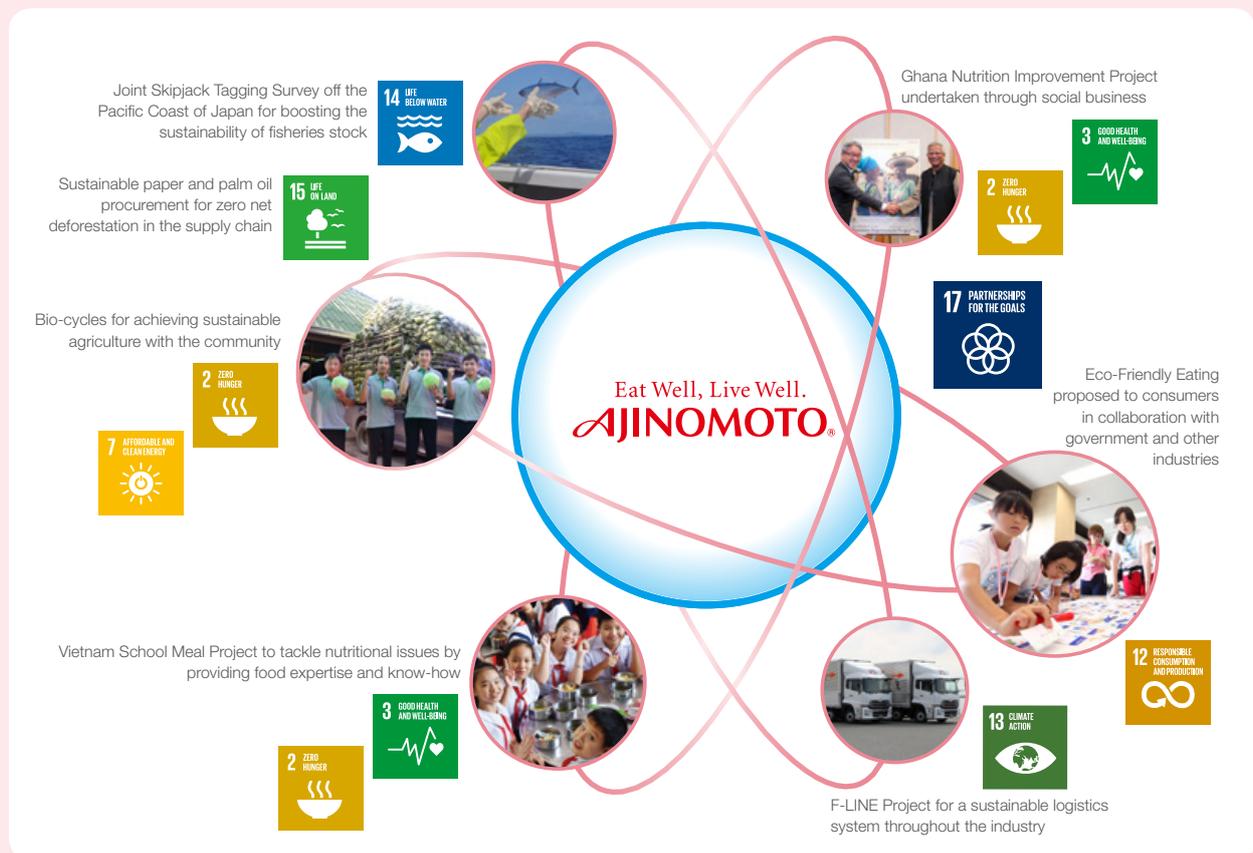
The Ajinomoto Group has committed to help resolve three issues facing 21st-century human society, the global sustainability, food resources, and health and well-being, through its deep-rooted, community-focused Food and AminoScience operations around the world. It also seeks sustainable corporate growth through the consistent creation of social and economic values as part of the Ajinomoto Group Creating Shared Value (ASV) philosophy.

In practice, ASV inevitably relates to many of the UN sustainable development goals (SDGs) because Ajinomoto Group business activities

designed to uphold the well-being of all living things on the planet overlap with the SDG social goal of ensuring that no one will be left behind.

However, it is necessary for related parties to work together toward this target even if, at times, their interests are not perfectly aligned. The issues cannot be resolved by one corporate group or one industry alone.

The Ajinomoto Group has built unique technologies and knowledge in a wide range of fields from research and development through procurement, manufacture, distribution, retail and services, as well as close links through its business with various stakeholders in countries and regions worldwide. With these combined qualities, the Group will continue to serve as a hub for social cooperation by proactively expanding links between stakeholders.



Governance: Diversity

Business operations



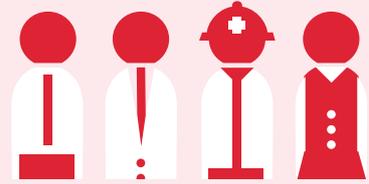
30
countries
and regions

Ajinomoto Group
operations and
human resources



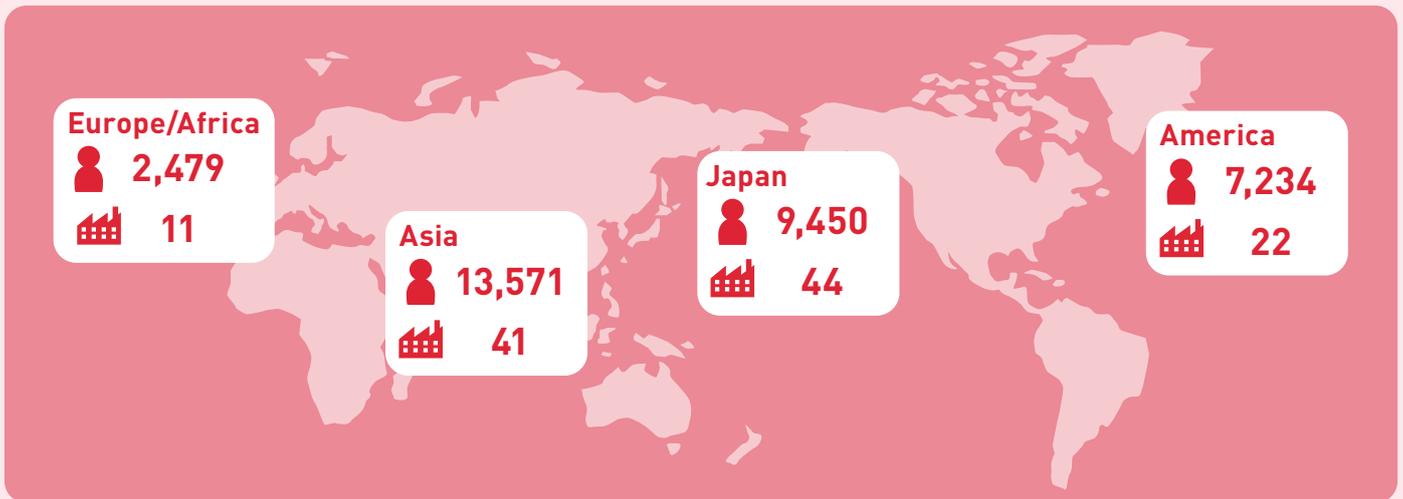
118
production
factories

Number of employees



32,734
globally

Over
1,700 R&D
personnel



(As of March 31, 2017)

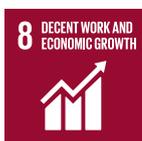
■ Ajinomoto Group's aim

In its aim to be a "Genuine Global Specialty Company," the Ajinomoto Group is creating working environments in which diverse world-class employees can fully engage their skills and competencies.

We are advancing reform of working practices and management innovation through employee engagement and career diversity.



Closely linked SDGs



FY2020 Integrated Targets for governance

Organization

- Optimization of support function for all group companies by consolidating role of Global Corporate into planning function
- Reinforcement, improvement, and evolution of governance systems that conform to the Corporate Governance Code

Target

Ratio of net sales to Group shared expenses (steady-state basis)



Talents

Promotion of customer-oriented innovation through creating large and diverse talent pool

- Development of 300 next-generation global managers and highly specialized talents
- Increase in internal promotion and mid-career hires of female managers through updating HR policies, etc.
- Proactive hiring of mid-career specialists

Target

Ratio of female managers (Group)



Ratio of locally hired overseas executives



Work-styles

Enhance the interactions between each employee and the society, and create “Best Place to Work” that enables further value creation

- Shortening of working hours in line with global standards
- Standardization of work flows (business administration, meetings, etc.)
- Mobile offices with ICT
- Enhancement of support for child care and nursing care
- Improvement of employees’ health and well-being

Target

Percentage of employees with high engagement^[1] (Group)



^[1] Percentage of employees who feel that their company is creating value towards solving social issues, and that they feel they are contributing to that value creation will be measured

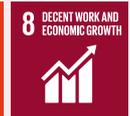
Average annual working hours (Japan)



Percentage of employees who feel that they are in good mental and physical health

Target and action plans will be determined based on the results from the Ajinomoto Global Engagement Survey for all full time employees to be implemented in 2017

Inclusiveness in the Workplace



9th Ajinomoto Global Future Leader Seminar (AGFLS)



ASV session at West African Seasoning Company

Value creation by “Keep looking, keep supporting people”

■ Human resources strategy for sustained competitiveness and growth

The Ajinomoto Group is run and supported by about 33,000 employees globally. The Group focuses its efforts on human resources development to create a place where each employee can fully use their skills to actively engage in productive work. “Keep looking, keep supporting people” is an embodiment of the Ajinomoto Group DNA and the source of value creation throughout the global Group.

The workplace environment is currently undergoing a transformation. As advanced nations experience demographic changes, falling birthrates, and aging populations, developing human resources and passing on skills has become increasingly more important for corporations. Employee diversity has also become a requisite for corporate growth in diversifying markets.

Food companies, in particular, conduct business that is rooted locally to each country and region based on an understanding of different and diverse food cultures. Therefore, the key is to develop human resources who can deploy businesses that meet the conditions in each country and region while taking the vision and direction of the Group into account. The entry of artificial intelligence (AI), robots, and other technologies into the labor market is also expected to bring out the fundamental issue of how humans will work in the future.

Incorporating this changing social landscape into its approach on human resources, the Ajinomoto Group formulated a medium-term plan for 2017-2019.

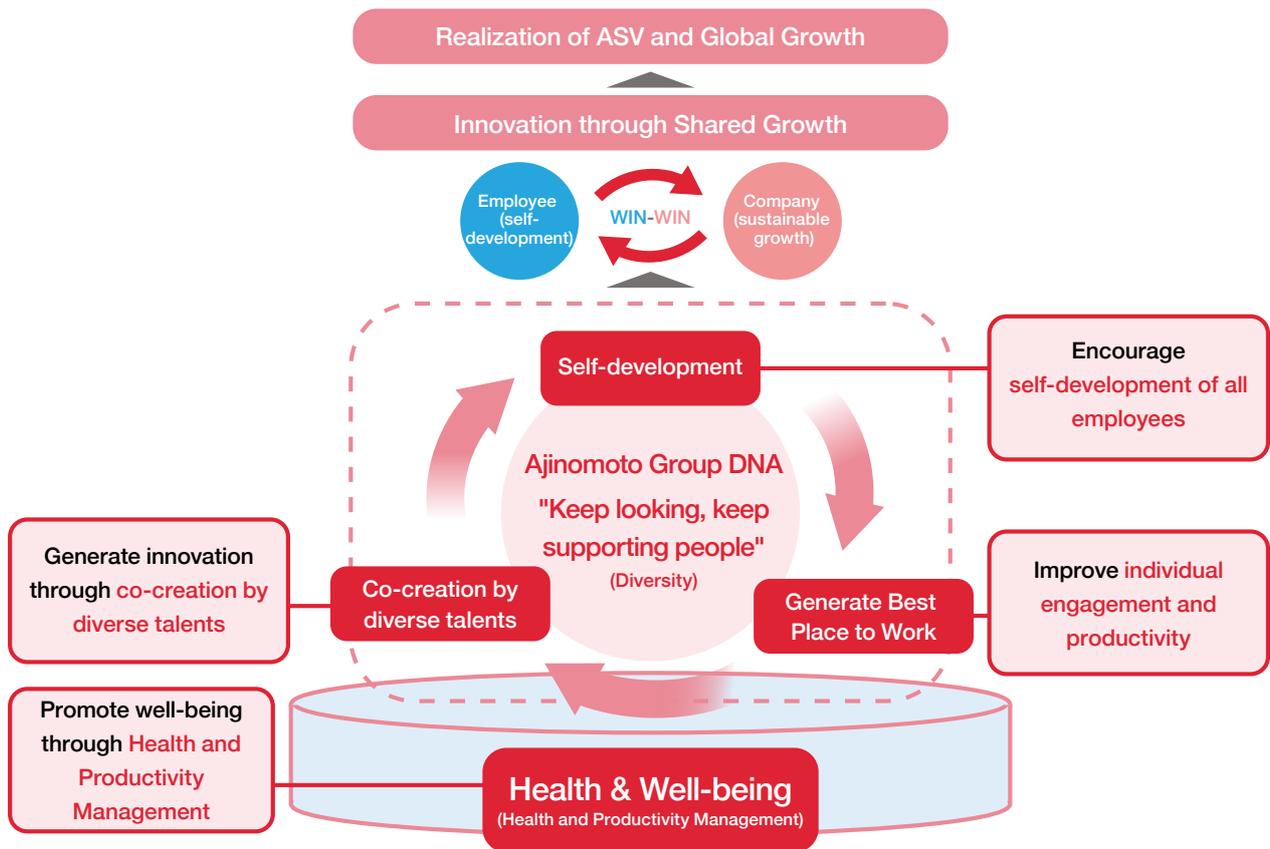
■ Innovation through co-creation by diverse talents

Global human resources management requires the establishment of a single position and talent management system. For position management, global key positions of major group companies around the world will be determined and their work requirements specified by the end of fiscal 2018. Key global talents will also be identified and individual training programs drawn up and implemented. This will bring the Group closer to its goal of “Right Person for Right Position.”

At the same time, the Ajinomoto Group is committed to cultivating a corporate culture where diverse people can work and create together. Diversity initiatives so far have focused on the empowerment of female employees, especially in group companies in Japan, although initiatives for inclusion of LGBT and others are also planned for the future.

■ Encourage self-development of all employees

To successfully realize “Right Person for Right Position,” the necessary skills and role of each position must be clarified. In Japan and some ASEAN countries, the typical way of working was based on seniority and on letting employees experience different types of work. However, this work style may not sufficiently develop the individual expertise of employees.



To address this, plans are underway to clearly define the work and human resource requirements of global key positions and apply this to the career development of each employee.

Career development support is one of the pillars of talent management. The Ajinomoto Group encourages the self-development of each employee and carries out strategic development of the next generation of top management based on employee career plans and interviews. This initiative is scheduled for a more systematic implementation through the launch of Ajinomoto Academy in fiscal 2018.

■ Improve individual engagement and productivity

Providing a workplace where employees can work constructively and maintain high levels of productivity is necessary to sustain global growth. The Group is working on work style innovation programs that conform to local conditions for successive implementation starting from fiscal 2018.

In October 2017, an engagement survey of the 33,000 employees worldwide will be conducted. The outcome of the survey will be used to formulate an action plan for implementation of specific activities from fiscal 2018. A second survey will be conducted in fiscal 2019 for use in further improvements.

■ Promote well-being through Health and Productivity Management

As a company that provides products and services related to food, nutrition, and health, the Ajinomoto Group considers supporting the health of each employee as part of management. To act on this, the Group is preparing for the launch of its own health management system. A global Chief Health Officer (CHO) and country CHOs are scheduled for appointment in stages. Global guidelines will be set based on the global health management index specified by the World Health Organization (WHO).

To prevent absenteeism (opportunity loss due to work absence) and presenteeism (being present at work without sufficiently raising performance), regular health checkups and follow-ups will be performed, and unique measures that leverage the Group's food, nutrition and health products and services will be deployed to help improve the productivity of all employees.

Reference →
Labor Practices P73-80





Fiscal 2016 Activity Report

Responsibility for Global Sustainability Issues

The Ajinomoto Group recognizes that it has a corporate social responsibility to help build a more sustainable world. The Ajinomoto Group Philosophy guides the Group's efforts to help solve three material issues facing 21st-century human society: global sustainability, food resources, and health and well-being.

The business activities of the Ajinomoto Group naturally involve solving various challenges confronting customers, business partners, communities, the global community, and the ecosystems without which none of these could exist. Meeting these social expectations is a vital element of the Group's corporate responsibility.

Across all of its business activities, the Ajinomoto Group is determined to contribute solutions to various social challenges, doing its part in building a sustainable future for people and the planet.



Since fiscal 2011, the Ajinomoto Group has been utilizing the ISO 26000 guidance standard on social responsibility as a tool for assessing its sustainability initiatives and identifying further issues to address.



Three material issues facing 21st-century human society

Seven core subjects of ISO 26000

Organizational Governance

Corporate Value through Responsible Management

INDEX

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- Risk management system

P51 Compliance Framework

- Ajinomoto Group Principles (AGP)
- Compliance education to employees
- Compliance activities of the Business Conduct Committee
- Thorough information security

P55 CSR Management

Related company policies

● Ajinomoto Group Principles

<https://www.ajinomoto.com/en/activity/policy/>

● Ajinomoto Group Security Policy

https://www.ajinomoto.com/en/activity/policy/security_policy.html

● Ajinomoto Global Tax Policy

https://www.ajinomoto.com/en/activity/policy/global_tax_policy.html

● Ajinomoto Group Risk Management Basic Policy

https://www.ajinomoto.com/en/activity/policy/risk_management_basic_policy.html

Fiscal 2016 activity highlights

● Held regular compliance training and AGP worksite meetings

Ajinomoto Co., Inc. held regular training sessions and worksite meetings on the Ajinomoto Group Principles (AGP) to raise compliance awareness, and provide employees an opportunity to discuss any compliance-related issues in the workplace.



Both men and women can use Child care leave and Medical care leave!



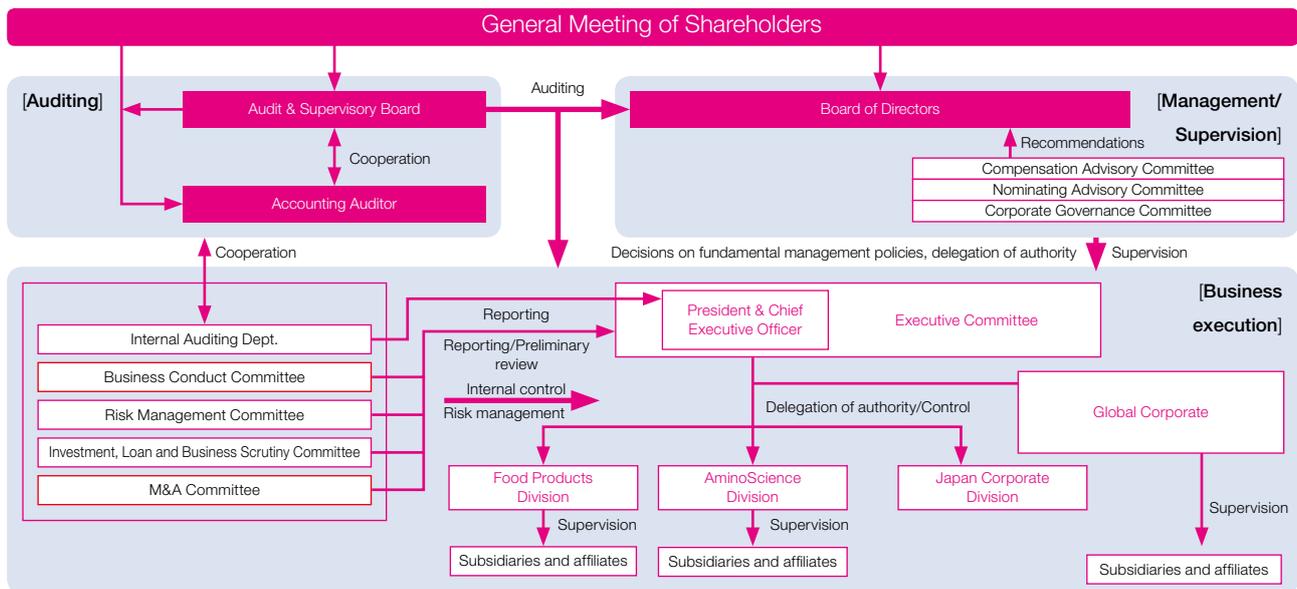
➔ P52-53

Corporate Governance

Ajinomoto Co., Inc. has passed down the spirit of improving people's nutrition through umami seasonings since its founding. The company is committed to helping resolve the issues faced by 21st-century human society, most notably global sustainability, food resources, and health and well-being. Through the enhancement and strengthening of corporate governance, the company will progress toward becoming a "Genuine Global Specialty Company" that builds positive relationships with its stakeholders, achieves sustainable corporate growth, and continually increases its corporate value.

Corporate governance framework

Corporate governance organization



Audit & Supervisory Board

The Audit & Supervisory Board members work together with the accounting auditor and Internal Auditing Department to conduct audits on the execution of duties by directors.

Nominating Advisory Committee

The Nominating Advisory Committee consists of four directors, including three outside directors. The Committee receives inquiries from the Board of Directors and deliberates on such matters as director nominees and proposals for the election of directors with titles and representative directors. The results of these deliberations are reported to the Board of Directors.

Board of Directors

The Board of Directors makes decisions on important business matters and supervises the execution of duties by directors and corporate executive officers.

Compensation Advisory Committee

The Compensation Advisory Committee consists of four directors, including three outside directors, and one corporate vice president. The Committee receives inquiries from the Board of Directors and deliberates on proposals for director and corporate executive officer, etc. compensation. The results of these deliberations are reported to the Board of Directors.

Executive Committee

The Executive Committee deliberates on basic company management policies and makes important decisions concerning business execution.

Corporate Governance Committee

The Corporate Governance Committee consists of five directors, including three outside directors, and one Audit & Supervisory Board member (external). The Committee receives inquiries from the Board of Directors and holds discussions on matters related to governance. The results of these discussions are reported to the Board of Directors.

Overview of the Corporate Governance Structure

Main Items	Current Status
Type of system	Company with Audit & Supervisory Board
Number of directors (including outside directors)	9 (3)
Number of Audit & Supervisory Board members (including Audit & Supervisory Board members [external])	5 (3)
Number of Board of Directors' meetings held (FY2016) (Average attendance rate of outside directors) (Average attendance rate of Audit & Supervisory Board members [external])	18 (92%) (100%)
Number of Audit & Supervisory Board meetings held (FY2016) (Average attendance rate of Audit & Supervisory Board members [external])	15 (100%)
Directors' term of office	2 years
Adoption of corporate executive officer system	Yes
Voluntary committees of the Board of Directors	Nominating Advisory Committee, Compensation Advisory Committee, Corporate Governance Committee
Compensation systems for officers, etc.	(1) Monthly compensation, (2) Short-term company performance-linked compensation, (3) Medium-term company performance-linked stock compensation
Accounting auditor	Ernst & Young ShinNihon LLC



Reference

Corporate Governance Report
https://www.ajinomoto.com/en/ir/strategy/corp_gov/main/00/teaser-items1/0/linkList/00/link/Governance_E.pdf
Ajinomoto Group Integrated Report 2017
https://www.ajinomoto.com/en/aboutus/integrated_report

Risk management system

Role of the Risk Management Committee



Risk Management Committee

The Ajinomoto Group established the Risk Management Committee in 2002 to enhance its capacity to respond to accidents and incidents. The Group takes measures grounded in proactive risk prevention and the Ajinomoto Group Risk Management Basic Policy: "By promoting strategic risk management, we make the Ajinomoto Group resilient to risks, and increase the Group's value." In fiscal 2017, the Risk Management Committee will be reorganized along with the below-described Business Conduct Committee to build an expanded and more effective internal governance function.

Each organizational unit and group company appoints a person responsible for risk management (general manager) and risk personnel who conduct their own management using the PDCA cycle. Aggregating and analyzing these bottom-up risks gives a clear overview of risk trends across the Ajinomoto Group. In fiscal 2016, the Group identified five key risk areas: 1) Product, manufacturing, and distribution risk involving quality problems caused by intentional product tampering, 2) Information management risk resulting from trade secret leaks, 3) Accident and disaster risk at worksites, 4) Labor management risk stemming from legal and cultural differences between countries, and 5) The legal risk of failing to be compliant with national laws.

In the face of dynamically and rapidly changing macro business conditions such as global politics, economics, and social issues, Ajinomoto Co., Inc. also supplements this bottom-up approach with 16 significant thematic group-wide risks, which require cross-organizational management, including geopolitical macro environmental risk, global competitive risk, global climate change risk, reputation risk, ICT and technological innovation risk, and legal risk.

Strengthening global crisis management has also become a significant issue in the wake of recent global events. The Risk Management Committee shares risk-related information across the Group by issuing written risk warnings, and, if necessary, issuing notices regulating business trips, etc., to ensure the safety of group employees. In fiscal 2016 the committee also began worksite training to teach employees how to protect themselves in critical situations. It is now building a global network of regional headquarters tasked with mobilizing a rapid response in the event of a crisis.

Each division, moreover, has a business continuity plan (BPC) that the Group revises regularly and implements to enhance business resilience to large-scale disasters.

Reference

Ajinomoto Group Principles & Policies

Ajinomoto Group Risk Management Basic Policy

Reference

Ajinomoto Group Integrated Report 2017 P27

Response to Major Risks

Compliance Framework

The Ajinomoto Group requires all executive officers and managerial staff, and all employees, including temporarily employed staff such as contract and part-time employees, not only to comply with the law but also with the Ajinomoto Group Principles (AGP). With the aim of becoming a “Genuine Global Specialty Company,” the Group will work to further consolidate the compliance framework.

Ajinomoto Group Principles (AGP)

The Ajinomoto Group Principles (AGP) declare the conduct that all managers and employees across the Ajinomoto Group should understand and practice every day, and also represent the Group’s sincere commitments made to all stakeholders. Uniform AGP were introduced across the Group in fiscal 2014 to strengthen global governance.

The AGP is published online in 21 languages, including the original Japanese and English-language versions, to serve regions/countries in which the Ajinomoto Group operates.

AGP positioning

The AGP was redefined as actions that all employees should understand and practice daily in order to realize the Group Mission and Vision, in accordance with the Ajinomoto Group Way within the new “Our Philosophy” framework.

The new framework clearly conveys to all stakeholders that ASV—the co-creation of social value through our business—is essential to implementing the Group vision of becoming a “Genuine Global Specialty Company,” and positions the AGP along with the Way as foundational to the Group Mission, Vision, and ASV.

Reference

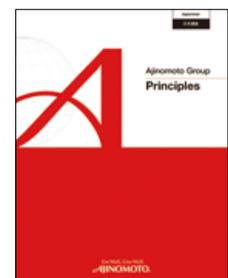
Ajinomoto Group Principles & Policies
Ajinomoto Group Principles (AGP)

What the Ajinomoto Group Aims for



AGP Overview

1. **Provision of Safe, High-Quality Products and Services**
 - 1.1 Developing and delivering safe, high-quality products and services
 - 1.2 Assuring product quality
 - 1.3 Providing information and communication appropriately
 - 1.4 Advertising and marketing
2. **Contribution to the Global Environment and Sustainability**
 - 2.1 Ensuring that our business activities contribute to environment
 - 2.2 Communicating with society about the environment
3. **Fair and Transparent Transactions**
 - 3.1 Complying with antitrust and related laws
 - 3.2 Ensuring fair purchasing transactions
 - 3.3 Fulfilling social responsibilities in purchasing practices
 - 3.4 Practicing appropriate socialization and courtesies
 - 3.5 Prohibiting bribery and corruption
 - 3.6 Avoiding any involvement with organized criminal elements
 - 3.7 Managing imports and exports
4. **Approach to Human Rights**
 - 4.1 Respecting human rights
 - 4.2 Upholding basic principles and rights related to labor
5. **Human Resources Training and Ensuring Safety**
 - 5.1 Providing equal employment opportunities and fair human resource policies
 - 5.2 Ensuring the development of the Ajinomoto Group as well as personal growth
 - 5.3 Prohibiting discrimination and harassment
 - 5.4 Creating safe and comfortable work environments
6. **Working with Local Communities**
 - 6.1 Ensuring that our business activities contribute to society
 - 6.2 Respecting local cultures
 - 6.3 Cooperating with NGOs and NPOs
 - 6.4 Donations, sponsorship activities and foundation administration
7. **Responsibilities to Shareholders, Investors and Other Stakeholders**
 - 7.1 Properly disclosing information
 - 7.2 Ensuring the reliability of financial reporting
 - 7.3 Prohibiting insider trading
8. **Protection and Management of Corporate Assets and Information**
 - 8.1 Managing corporate assets
 - 8.2 Managing information
 - 8.3 Protecting intellectual property rights
9. **Clear Separation of Business and Personal Affairs**
 - 9.1 Avoiding conflict of interest
 - 9.2 Business relationships belong to the company
 - 9.3 Personal advocacy and political activity



*Published in 21 languages for online publication
In alphabetical order: Arabic, Bengali, Chinese (simplified), Chinese (traditional), English, Filipino, Flemish Dutch, French, German, Indonesian, Japanese, Khmer, Korean, Malay, Polish, Portuguese, Russian, Spanish, Thai, Turkish, Vietnamese.

Compliance education to employees

To instill the values of the AGP and raise compliance awareness, the Ajinomoto Group holds education and training sessions for new hires, during promotions, and for various job grades. For example, six compliance training sessions are held for some 400 group managers every year.

Group companies worldwide also make extensive use of AGP awareness posters, which are redesigned annually and translated into 11 languages.

Daily reminders on the AGP and compliance are sent through the intranet and automatically appear on employee computer screens at the startup. In fiscal 2016, two group companies in Japan were added as recipients to these messages. At the Head Office and Kawasaki Administration & Coordination Office, these messages are also distributed as digital signage.

Recipients of these AGP messages and digital signage will continue to be expanded to group companies and various business sites in Japan.



Both men and women can use Child care leave and Medical care leave!

Startup screen to promote awareness of the AGP

Maternity Harassment can be disciplinary punished!



AGP awareness poster (Japanese version), fiscal 2016

Compliance activities of the Business Conduct Committee

The Business Conduct Committee of Ajinomoto Co., Inc., established in May 1997, promotes group compliance by ensuring that all personnel are well informed of the AGP and verifying that business activities are compliant with them. Major group companies in and outside Japan have also set up their own business conduct committees to boost AGP awareness and address their unique issues.

Business Conduct Committee



As of July 2017

HOTLINE for whistleblower and harassment advisory service

Ajinomoto Co., Inc. and its major group companies in Japan have established the HOTLINE as a whistleblower system that enables employees, including part-time and temporary workers, to make reports or seek advice by phone, e-mail, fax, letter, or other means. Internal rules clearly state that users are guaranteed anonymity and will not be subject to any adverse treatment as a result of their reports. Information on the HOTLINE is provided through various training programs, the intranet, posters, and cards explaining how to use it.

Since fiscal 2015, the number of group-wide HOTLINE reports has been counted and disclosed. In fiscal 2016, 63 reports were submitted to group companies in Japan, of which 25 were submitted to the Ajinomoto Co., Inc., compared to 28 in fiscal 2015. The Business Conduct Committee reports anonymized HOTLINE content to the Executive Committee and Board of Directors every quarter.

Ajinomoto Co., Inc. and some of its group companies have also assigned in-house staff to a dedicated harassment advisory service to complement the service it has outside the company.

Questionnaire on AGP awareness

Every November, Ajinomoto Co., Inc. and its group companies in Japan conduct an anonymous questionnaire on the AGP to monitor understanding and implementation of the AGP and check for compliance issues. In fiscal 2016, more than 13,000 group company employees responded.

The results of the questionnaires are reported to the Business Conduct Committee, shared with participating group companies, and made available to all employees on the intranet. Each company addresses specific issues identified through the questionnaires while working closely with relevant departments.

Worksite meetings on the AGP

Since 1998, members of the Business Conduct Committee have been visiting worksites at Ajinomoto Co., Inc. to talk with employees about the standards of business conduct (currently about the AGP) and hear directly about issues concerning compliance in the workplace. In fiscal 2016, 31 AGP worksite meetings were held for 297 participants, and group companies in Japan also hold similar meetings every year.

Meeting summaries are shared by Committee members to organizational heads and by participants with their workplaces, and posted on the intranet for all employees to read. Issues raised at these venues warranting company-wide efforts are then reported to and discussed by the Business Conduct Committee and incorporate into specific policies to advance AGP and activities to promote compliance.

In fiscal 2016, these meetings focused on human rights, using a group company's online commercial advertisement to discuss across the Group and deepen awareness of human rights, social discrimination, and harassment issues in Japan. Global issues and trends were also shared in the meetings, such as a description of the UN Guiding Principles on Business and Human Rights and the UK Modern Slavery Act.

Number of HOTLINE reports

	FY2016	yr/yr
Group companies in Japan	63	(+7)
Ajinomoto Co., Inc.	25	(-3)

Reference

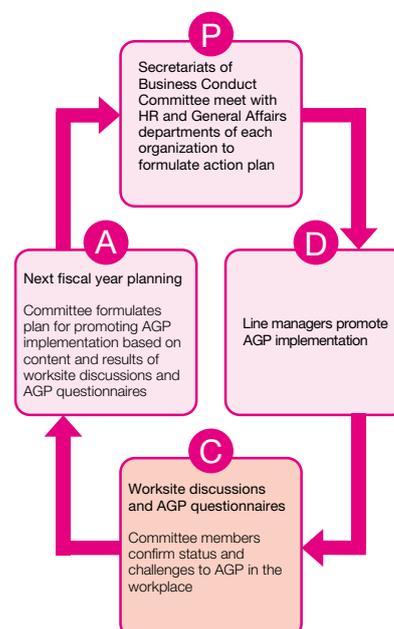
Human Rights P68

Human rights awareness training of employees



AGP worksite meeting held at the Shikoku Branch

Role of worksite discussions and questionnaires in promoting AGP implementation



Thorough information security

In order to properly handle information, the Ajinomoto Group manages Plan-Do-Check-Act (PDCA) cycles of information security that establish rules, notify them, check handling conditions, and lead to business improvements.

Information security inspections

Ajinomoto Co., Inc. conducts information security inspections periodically at all worksites each year. The inspections mainly focus on the basics of proper information handling, including management of IT equipment, confidential information, and personal information. In addition to regular security inspections, the company launched a comprehensive inspection of external cloud service use in September 2015, with its inventory and management status updates conducted every year.

Establishment of new guidelines

The Ajinomoto Group formulated the Information Security Policy and the Information Management Regulations as the Group's security rules in April 2004. Responding to the rapid changes in technology use in recent years, in July 2014 the Group established Guidelines for External Cloud Use and Smart Device Guidelines and communicated them to Ajinomoto Group companies worldwide. In addition, in September 2015, Ajinomoto Co., Inc. revised the Information Management Regulations, newly established the Trade Secret Management standards to fortify management of technical and other highly confidential information, and communicated them to group companies worldwide.

Information security training

The Ajinomoto Group conducts information security training seminars for new recruits and managers. As part of such training, the Information Management Guidebook (revised, electronic version) published in May 2016 is introduced to all Ajinomoto Co., Inc. employees, together with the implementation of a comprehension test of its contents.

Fiscal 2016 activities

- | | |
|---|-------------------------|
| ① Group training for line managers in operational and sales divisions
Three times: Jul. 15, Nov. 11, 2016, Mar. 10, 2017 | 210 participants |
| ② Group training for line managers in production and R&D divisions
Three times: May 20, Sep. 2, 2016, Jan. 13, 2017 | 180 participants |
| ③ Group training for new hires Apr. 1, 2016 | 64 participants |

Response to new risks

The Ajinomoto Group has begun addressing the emerging risks expected to accompany advances in information technology. As a response to information leaks resulting from viruses transmitted through targeted email attacks, a risk covered by various news outlets of late, the Group is educating internal users, blocking access to fraudulent websites that trigger virus transmission, and operating systems that detect the hijacking of computers by an outside attacker. These are in addition to existing strategies such as strengthening virus protection for company computers and servers and increasing detection of online hacking.

Reference

Ajinomoto Group Principles & Policies
Ajinomoto Group Security Policy



Information Management Guidebook

Reference

Consumer Issues P131
Rigorous management of personal information

CSR Management

The Ajinomoto Group believes achieving the Group Mission is the base of our corporate social responsibility. The Group is striving to realize the new group philosophy, with a focus on the Ajinomoto Group Creating Shared Value (ASV).

■ Mechanisms for valuing expert opinion

The Ajinomoto Group values external opinion for advancing its CSR objectives, and has gathered comprehensive feedback on CSR strategy from outside experts and used the information to narrow down specific activity themes to the three material issues facing 21st-century human society (global sustainability, food resources, health and well-being) and contribute to society through business as strategic CSR. Since 2011, the Group has deepened its understanding of these issues by holding theme-specific dialogues, including with experts overseas to incorporate a more global perspective. The Group also conducted surveys and hearings with worldwide experts to help pursue the SDGs adopted at the United Nations in 2015, and reviewed its own materiality and individual activities.

As a mechanism for periodically gathering opinions from experts, the Group established the Ajinomoto International Cooperation Network for Nutrition and Health (AIN) as a committee of outside experts in 1999, its 90th anniversary. Members are international organizations, development aid institutions, NGOs, professors, and experts on international cooperation and nutrition issues. They advise on selecting NGO and NPO programs to support, on initiatives for nutrition issues, and on social contribution activities in general.

■ Advancement of CSR as one Group

The Group has sought to address social and environmental issues through business as strategic CSR. In the FY2014–2016 Medium-Term Management Plan, the Group took this work to the next level with ASV, which specifies social and environmental contribution objectives for each business division. In the FY2017-2019 Medium-Term Management Plan, announced in February 2017, the Group sets non-financial, numerical targets to work toward through PDCA management.

Before ASV, the Group had already implemented ISO 9001 and ISO 14001 management systems as well as the Ajinomoto Group Principles to ensure business optimization and contribution to sustainability. To confirm whether its steps were achieving the current requirements of the global community, the Group reexamined its initiatives against the ISO 26000 guidance on corporate social responsibility in fiscal 2012, which highlighted some new opportunities for improvement. In the medium-term management plan, the Group strengthens existing management systems by clarifying activities to reflect requests for disclosure of non-financial information from organizations such as the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB).

In April 2016, Ajinomoto Co., Inc. set up the Global Communications Dept. to raise corporate value by strengthening global governance and disclosing non-financial information, and its CSR Group is in charge of CSR management and communication functions. In 2017, most activities of a public-welfare nature were transferred to newly launched The Ajinomoto Foundation. The Ghana Nutrition Improvement Project, AIN Program, disaster recovery assistance in Tohoku, and other social programs are now supported through donations to this foundation.

■ Framework for CSR Activities



Reference →

Community P143

Activities of the Ajinomoto Group's Foundations

Fair Operating Practices

Ethical and Honest Practices

INDEX

P57 Responsible Procurement

- Ajinomoto Group procurement policy
- Initiatives for sustainable procurement of critical raw materials
- Sustainable skipjack fisheries and resource use
- Sustainable procurement of coffee beans
- Zero net deforestation
- Sustainable paper
- Sustainable palm oil

P63 Fair Competition

P63 Prevention of Corruption

P64 Protection and Proper Use of Intellectual Property

Related company policies

- **Ajinomoto Group Principles**
<https://www.ajinomoto.com/en/activity/policy/>

- **Ajinomoto Group Basic Purchasing Policy**
https://www.ajinomoto.com/en/activity/policy/basic_purchasing_policy.html

- **Ajinomoto Co., Inc. Supplier CSR Guidelines**
https://www.ajinomoto.com/en/activity/policy/supplier_csr_guidelines.html

- **Ajinomoto Group Guidelines for Procurement of Environmentally Responsible Paper**
https://www.ajinomoto.com/en/activity/policy/environmentally_responsible_paper.html

- **Ajinomoto Group Biodiversity Policy**
https://www.ajinomoto.com/en/activity/policy/biodiversity_policy.html

- **Ajinomoto Group Bribery Prevention Policy**
https://www.ajinomoto.com/en/activity/policy/bribery_prevention_policy.html

Fiscal 2016 activity highlights

- Promoted the use of FSC®-certified paper



→ P61

- Strengthened stakeholder partnerships



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Responsible Procurement

The Ajinomoto Group seeks to fulfill its environmental and social responsibility on issues such as human rights and labor safety across raw material-producing regions and its supply chain. The Group believes this is key to securing sustainable, stable procurement now and in the future, and is committed to working closely with supply-chain stakeholders to ensure its procurement is socially responsible.

Ajinomoto Group procurement policy

Ajinomoto Group Basic Purchasing Policy

The Ajinomoto Group Basic Purchasing Policy was established in 2006. The policy stipulates that, in order to ensure fair, open, transparent and simple purchasing and to secure the trust of stakeholders including business partners, the Ajinomoto Group shall conduct rational purchasing operations in compliance with laws and regulations.

In addition to compliance, purchasing ethics and purchasing principles, the Ajinomoto Group Basic Purchasing Policy stipulates CSR should be practiced in cooperation with suppliers and other business partners.

Reference

Ajinomoto Group Principles & Policies
 Ajinomoto Group Basic Purchasing Policy
 Ajinomoto Co., Inc. Supplier CSR Guidelines

Guidelines for responsible procurement

The Ajinomoto Group has set the Ajinomoto Group Basic Purchasing Policy as the basic policy for purchasing under the Ajinomoto Group Principles (AGP). The Ajinomoto Group Basic Purchasing Policy outlines the responsible purchasing practice and requests suppliers and other business partners to promote CSR. Specific guidance is included in the Supplier CSR Guidelines and the policies and guidelines for sustainable procurement of agricultural, livestock, and fisheries products.

Going forward, the Ajinomoto Group intends to implement more effective measures based on these guidelines to ensure socially responsible action across the supply chain.

Guidelines for responsible procurement



■ Clarification of CSR expectations to suppliers and other business partners

① Initiatives at Ajinomoto Co., Inc.

Ajinomoto Co., Inc. formulated Supplier CSR Guidelines in fiscal 2013, detailing its expectations for suppliers to conduct socially responsible procurement under the Ajinomoto Group Basic Purchasing Policy. These guidelines encourage suppliers to implement independent improvements, promoting a common set of social responsibility values and objectives between the Ajinomoto Group and its suppliers. These actions aim to build community trust by fostering collaboration on CSR, as the company and its suppliers learn and grow together.

Ajinomoto Co., Inc. has informed all suppliers of the guidelines and solicited their cooperation through information sessions and documents. The company also developed a self-assessment questionnaire (SAQ) for suppliers to assess performance on socially responsible procurement. It has periodically asked suppliers to answer the SAQ and provided feedback on their responses. Supplier self-assessments include items on fostering pleasant working environments, fulfilling social responsibility obligations, and food defense management in production bases. Food-defense audits of suppliers, started in June 2015, are designed to promote consistent improvements in tangible and intangible food-defense initiatives. Individual feedback on partner firms' self-assessments was provided in March 2016 and improvements requested.

In addition, in June 2016, the company conducted another supplier survey to promote mutual understanding by confirming whether the company and its suppliers were achieving adequate two-way communication in accordance with company standards, and by incorporating supplier requests into future policies and actions. The company also started confirming food-defense items under quality audits from April 2017.

② Initiatives at Ajinomoto Group companies

Ajinomoto Frozen Foods Co., Inc. and Ajinomoto AGF, Inc., main group companies in Japan, have produced documents that establish clear expectations and solicit cooperation on socially responsible procurement by suppliers and other business partners.

The Ajinomoto Group will continue to expand the Supplier CSR Guidelines initiatives to encompass group companies in and outside Japan, so that they can assess their suppliers.

■ Formulation of policies and guidelines for sustainable procurement of agricultural, livestock, and fisheries products

Committed to sustainable practices that benefit local communities and economies, the Ajinomoto Group is systematically preparing policies and guidelines for the sustainable procurement of agricultural, livestock, and fisheries products.

In fiscal 2015, further detail was added to some of the policies in the Ajinomoto Group Guidelines for Procurement of Environmentally Responsible Paper to increase their effectiveness in procuring environment-friendly paper.

The Ajinomoto Group has already formulated the above Ajinomoto Group Guidelines for Procurement of Environmentally Responsible Paper and Ajinomoto Group Biodiversity Policy. Moving forward, it will work on procurement policies and action plans for critical raw materials to practice sustainable procurement.



Ajinomoto Co., Inc. Supplier CSR Guidelines



Information session with suppliers

Reference →

Human Rights P69

Considerations of human rights in business activities

Reference →

Ajinomoto Group Principles & Policies

Ajinomoto Group Guidelines for Procurement of Environmentally Responsible Paper

Ajinomoto Group Biodiversity Policy

Initiatives for sustainable procurement of critical raw materials

Principles for sustainable procurement

The biological resources for raw materials and the ecosystems that nurture them are natural capital^[1], a capital for business enterprises. Uses that damage or reduce natural capital will inhibit the continuation and growth of the business. The Group adheres to the following principles to ensure sustainable raw material procurement.

① Business process improvement	② Recovery and strengthening of natural capital	③ Cooperation and collaboration in social system creation	④ Individual adaptive approach
Business processes for procurement and use that reduce natural capital will be improved "so that the impact of raw material procurement and use is kept within limits of ecological cycles and ability to recover." ^[2]	In addition to keeping natural capital from decreasing, the recovery and strengthening of natural capital will be actively pursued, thereby creating environmental and social value through business activities.	Get actively involved in creating a sustainable social system. Expand procurement activities into the creation of social systems for supply chain, and production that recovers and strengthens sustainable natural capital. Cooperate and collaborate with various stakeholders and engage at the very top of the supply chain.	Adopt effective approaches according to the environmental and social issues of the supply chain for each resource or raw material. Monitor actual conditions and address adaptively.

[1] Referred to "The value creation process" in the International Integrated Reporting Framework

[2] Referred to Target 4 (business and biodiversity) of the Aichi Biodiversity Targets in the Convention on Biological Diversity. Expanding the viewpoint of business from the usual "environment-friendly," or lessening impact compared to the present or the past, to "doing right for the planet," or acting in light of the goal of global sustainability

Sustainable skipjack fisheries and resource use

Recently, skipjack tuna catches have surged in Central and Western Pacific Ocean, but notably worsening in Japanese coastal waters since the late 2000s. People have concerns about the sustainability of skipjack resources and the Japanese skipjack fishery.

To ensure sustainable skipjack resource use in the future, it is important to manage international fisheries based on appropriate rules, and to support sustainable regional development and the skipjack fishery, a basis of Japanese food culture.

Since 2009, Ajinomoto Co., Inc. has conducted skipjack tagging surveys in cooperation with a Japanese research institute. The results have been passed on by the Japanese government for discussions in international fisheries management organizations. The company has been working with research teams from four Japanese universities using cutting-edge biotelemetry technology to develop practical research into sustainable regional fishery. In cooperation with Taiwanese authorities and research institutes, the company has also contributed to expanding the survey area to follow the Kuroshio Current path northeastwards from Taiwanese waters and the Ryukyu Islands through the waters off Kochi, Shikoku right up to Western Japan.

Reference

Special Feature 2 P40-41

Skipjack ecological studies to increase sustainability of fisheries stock

Reference

The Environment P107-108

Initiatives for sustainable skipjack fisheries and resource use



Sustainable procurement of coffee beans

Coffee beans are grown in regions that are rich in biodiversity and are largely supplied by small coffee farmers.

In January 2013, Ajinomoto AGF, Inc. and its group companies participated in a meeting of the Common Code for the Coffee Community (4C Association),^[3] an international non-profit that encourages sustainable coffee production and distribution. Ajinomoto AGF, Inc. and its group companies also support Rainforest Alliance^[4] certification, a scheme that helps to improve environmental conditions at farms and better the lives of farmers and farm workers. The companies strive to procure coffee beans produced at farms that adhere to 4C Association and Sustainable Agriculture Network standards.

[3] Sets standards to support coffee growers in taking the critical first step to implementing sustainable practices in coffee production and processing.

[4] Works to protect forests, rivers, wildlife habitats, workers and their families, and the rights and welfare of cooperatives, through certification of coffee farms.

Reference

Ajinomoto AGF, Inc. "Sustainable procurement of coffee beans" (Japanese)

<http://www.agf.co.jp/csr/environment/sustainable.html>



Zero net deforestation

In addition to being directly implicated in habitat destruction and biodiversity loss, deforestation is also suspected to be responsible for 20% of global greenhouse gas emissions. Stopping deforestation is therefore critical to global environmental and social sustainability. While the causes of deforestation are complex, paper and wood production, soy and oil palm cultivation, and cattle ranching are considered major contributors.

The Ajinomoto Group is taking steps to ensure that the procurement and use of paper and palm oil for its business activities do not add to this deforestation burden.

Deforestation occurs when forests are cleared to make way for pulp and oil palm plantations. As a consumer goods manufacturer, the Ajinomoto Group requires materials derived from these biological resources, and is situated downstream on the supply chain that produces them. For these reasons, the Group is advancing the following initiatives to achieve responsible procurement of these critical raw materials and ensure sustainable business growth.

The first priority in this endeavor is to confirm and guarantee that raw materials currently procured by the Group are not causing environmental or social problems, such as deforestation or human rights violations. In recent years, society has become increasingly interested in any potential violation of the human rights of workers engaged in the production and processing of raw materials. Developing the ability to trace raw materials to the top of the supply chain is critical for this purpose so that immediate and appropriate action can be taken with supply chain stakeholders.

Paper, palm oil, and other raw materials need to be procured reliably and in an environmentally and socially ethical manner as procurement volumes grow with business. Sustainable procurement and use of resources must become the social norm because that will help ensure Ajinomoto Group procurement is also sustainable. To that end, the Group is actively engaged in building social mechanisms for promoting sustainable production and supply chains, and has committed to leading collaborative efforts with various stakeholders toward achieving Goal 12 of the SDGs: Ensure sustainable production and consumption patterns.

Both zero deforestation and a proactive stance on human rights issues are becoming increasingly important. The Ajinomoto Group believes that utilizing frameworks such as the Roundtable on Sustainable Palm Oil (RSPO) is an effective, efficient and convincing means of satisfying both requirements. The Group actively adopts the most credible standards and promotes their broader implementation.

However, this does not necessarily mean only purchasing certified materials. The Group seeks to purchase certified materials whenever possible and practical, but limited supplies of certified materials such as palm kernel oil for making coffee creamers often make responsible procurement difficult. In such cases, it is important to use established standards and mechanisms for promoting sustainable consumption and production to develop a clear way of ensuring alternative products do not cause any environmental or social damage.

Action policies for sustainable paper and palm oil procurement

Aspiration

As a global corporation that strives to be socially responsible, the Ajinomoto Group supports zero net deforestation and actively promotes sustainable procurement and use of paper and palm oil on a global Group level.

Policies

- Pursue sustainable procurement for all paper and palm oil used by group companies
- Target: Achieve sustainable procurement by 2020
- Contribute to the sound growth of social mechanisms that support sustainable procurement of papers and palm oils

Reference

Special Feature 2 P39-40

Zero net deforestation

Sustainable paper

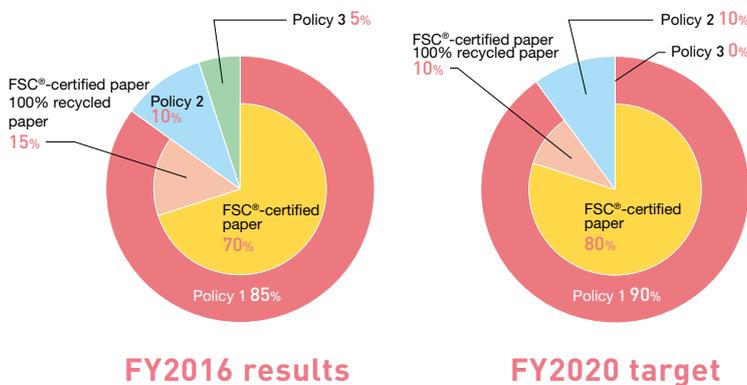
Internal efforts

In accordance with the Guidelines for Procurement of Environmentally Responsible Paper, the Ajinomoto Group makes efforts appropriate for each country and region to acquire sustainable sources for all office paper and container and packaging paper it uses worldwide. The Group Procurement Center manages most paper procurement in Japan.

In Japan, the Ajinomoto Group maintains policy compliance for office paper through its indirect materials purchasing system.

In fiscal 2015 the Ajinomoto Group in Japan also stepped up efforts to utilize FSC®-certified paper in containers and packaging. This poses greater challenges in terms of paper performance than similar efforts for office paper. The Group got together with the Consortium for Sustainable Paper Use (CSPU) to encourage each paper supplier to attain FSC® certification. As a result, the number of FSC® certifications for paper used in Ajinomoto Group packaging and society in general has increased dramatically and rate of FSC®-certified packaging has risen sharply. The active introduction of FSC®-certified paper for gift packaging, etc. progressed well in fiscal 2016, with approximately 70% switching to FSC®-certified paper. The Group is planning to include the FSC®-certification mark on packaging for *HON-DASHI*® and other major products from fiscal 2017, and will pursue further initiatives based on its detailed action plan through fiscal 2020.

Container and packaging paper: Past results and future targets



Stakeholder partnerships

Awareness of sustainable paper procurement and use is low in Japanese industry and society at large. Ajinomoto Co., Inc. is calling on various entities to make responsible paper the norm nationwide, as it advances such activities in its own offices. Part of this effort includes continued participation in the CSPU.

In July 2016, the CSPU held a symposium to promote sustainable paper use through supply chain partnerships. There are a number of recent examples of companies collaborating with suppliers on providing or obtaining more environmentally and socially conscious paper products. To accelerate this trend, the symposium presented the activities of the CSPU as well as those of suppliers and industry groups, and also held discussions with participants on solutions to expanding sustainable paper use.

Specific policies of the Ajinomoto Group Guidelines for Procurement of Environmentally Responsible Paper

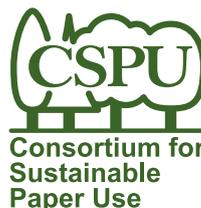
Policy 1
Preferentially procure FSC®-certified paper and 100% recycled paper
Policy 2
Procure paper considered environmentally responsible by the Ajinomoto Group
Policy 3
Do not procure paper products without assurance that appropriate procedures have been followed with regard to logging of timber raw material, in keeping with forest regulations governing the area where timber is sourced

*Policy 2 example: Paper derived from FSC® Controlled Wood



Reference →
Special Feature 2 P39
 Zero net deforestation

Reference →
The Environment P110
 Implementation of environmentally friendly design of containers and packing



Web →
The Consortium for Sustainable Paper Use (WWF) (Japanese)
http://www.wwf.or.jp/corp/upfiles/20131119pcm_br.pdf

Sustainable palm oil

Internal efforts

Ajinomoto Group initiatives on sustainable palm oil are still in the early stages overall. The Group's food product and specialty chemicals businesses use palm oil-derived ingredients of various specifications and the availability of certified ingredients varies widely. Palm kernel oil-derived materials, which are particularly difficult to procure in certified form, account for roughly 35%. Much of the palm oil is consumed in places like Thailand and South America which lack the supply chain infrastructure for providing certified oil. Consequently, roughly 80% of palm oil-derived materials used by the Group in 2016 had no or an inadequate certification schemes. In 2016, MB and B&C-certified palm oil accounted for about 9% of palm oil use across the Group, although it was limited to operations in Japan.

At the beginning of 2017, the Group set a procurement target of 100% certified products by fiscal 2020, not just in Japan but across all Ajinomoto Group operations. The Group is working toward the target, making roadmaps from 2018 to 2030 for each business and country or region, in light of the fact that the possibilities for procuring sustainable palm oil greatly differ depending on the country or region and the materials used.

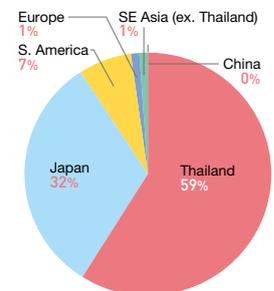
Ajinomoto Group goals

Japan
Shift to sustainable palm oil by fiscal 2020
<ul style="list-style-type: none"> Budget for phase-in Strive to build MB supply system for materials lacking it (food-grade kernel oil)
Overseas
Working with stakeholders (experts, NGOs, suppliers, etc.), devise a range of measures (e.g., ensure traceability, support smallholders, raise social awareness) to address challenges specific to each material type and producing region
<ul style="list-style-type: none"> Report progress through the RSPO ACOP

Palm oil (including kernel oil) used by the Ajinomoto Group

(Tonnes/year in 2016)

Japan	Processed foods	8,200
	Specialty chemicals	2,500
Overseas	Processed foods	24,300
Group total		35,000



Stakeholder partnerships

Since joining the Roundtable on Sustainable Palm Oil (RSPO) in August 2012, Ajinomoto Co., Inc. has been partnering with other businesses and Japanese stakeholders to promote sustainable procurement and use of palm oil.

At Japan Day, hosted by the Consumer Goods Forum (CGF) in April 2016, the company advocated for sustainable palm oil on behalf of food companies in a special session during the event, and helped organize a subsequent CGF workshop. It also served as vice chair of the executive committee for RSPO Japan Day 2016, held in September.

Ajinomoto Co., Inc. will further contribute to promoting sustainable palm oil across Japanese industry.

Reference

Special Feature 2 P40

Efforts to solve sustainable palm oil procurement issues

Web

Annual Communications of Progress (ACOP) to the RSPO

<https://www.rspo.org/members/1642/Ajinomoto-Co.-Inc>

*Report detailing the Ajinomoto Group's plans and progress



Check progress at www.rspo.org

Fair Competition

In order to ensure fair and transparent business transactions, the Ajinomoto Group Principles (AGP) require officers and employees to fully understand and comply with laws and regulations concerning competition in all countries in which the Group operates. Based on the AGP, the Ajinomoto Group has developed corporate guidelines for compliance with antitrust law in Japan. Outside of Japan, the Ajinomoto Group has implemented corporate guidelines for compliance with United States antitrust law and European competition law, which apply to some 20 group companies. Ajinomoto Co., Inc. also implements Supplier CSR Guidelines that prohibit its suppliers from engaging in behavior that disturbs equitable, transparent, and unfettered competition.

Raising employee awareness

The Ajinomoto Group regularly holds trainings on antitrust law for managers of Ajinomoto Co., Inc. and all other group companies in Japan. Major overseas group companies also hold antitrust law trainings taught by local lawyers; in fiscal 2016, such trainings were held in the U.S., France and Belgium. While antitrust laws prescribe various rules applicable to the business transactions of a company, in these trainings, the Group makes sure to take time to explain about the prohibition on cartels, which has an especially large impact on fair competition.

Also in fiscal 2016, training on the Act against Unjustifiable Premiums and Misleading Representations was held for all sales staff of Ajinomoto Co., Inc. and the marketing department of Ajinomoto Frozen Foods Co., Inc.

Moving forward, the Group will continue to hold antitrust law trainings to further raise the awareness of its employees.

Reference →

Ajinomoto Group Principles & Policies
Ajinomoto Group Principles (AGP)

Antitrust law training structure

	Ajinomoto Co., Inc.	Group companies in Japan (incl. Ajinomoto Co., Inc.)	Overseas group companies
General education	<ul style="list-style-type: none"> •Training for new hires •Training for mid-year hires •Training for sales personnel 	<ul style="list-style-type: none"> •Compliance training 	<ul style="list-style-type: none"> •Legal training

*Antitrust law program held in all trainings

Prevention of Corruption

Bribery and corruption not only destroy trust in a company, but can also be factors hindering the development of a region by causing human rights violations, poverty, and environmental destruction. The Ajinomoto Group strives to prevent bribery and corruption by implementing the AGP.

Ajinomoto Group Bribery Prevention Policy

The Ajinomoto Group prohibits bribery of any form through the AGP and also holds regular training for managers of Ajinomoto Co., Inc. and all other group companies in Japan on the proper relationship to have with public officials, including those of foreign countries.

In July 2016, the Group reinforced its stance on bribery by issuing a separate Ajinomoto Group Bribery Prevention Policy. This Policy is structured so as to be effective; it includes an explanation of the meaning of such terms as "public officials" and "bribery," and stipulates, among other matters, that particular attention must be paid in the proper accounting of expenditures related to public officials, and that the compliance and execution of the Policy will be monitored through audits.

Reference →

Ajinomoto Group Principles & Policies
Ajinomoto Group Principles (AGP)
Ajinomoto Group Bribery Prevention Policy

Protection and Proper Use of Intellectual Property

The Ajinomoto Group recognizes intellectual property (IP) as an important asset. Along with proper use, the Group takes special care not to infringe upon the rights of others.

Basic IP policies

The Ajinomoto Group takes the following measures to establish competitive advantage, generate profit, and grow globally: 1) Strategically secure IP rights including know-how for essential technologies, 2) Actively incorporate and partner with outside technologies (i.e., open innovation), 3) Use held technologies and execute IP rights through licensing and legal action, 4) Protect products and increase brand value using trademark systems, 5) Minimize infringement risk through strict clearance procedure and respect others' IP rights, 6) Provide survey and analysis information to group business and R&D departments, and 7) Train IP staff and utilize internal and external IP networks.

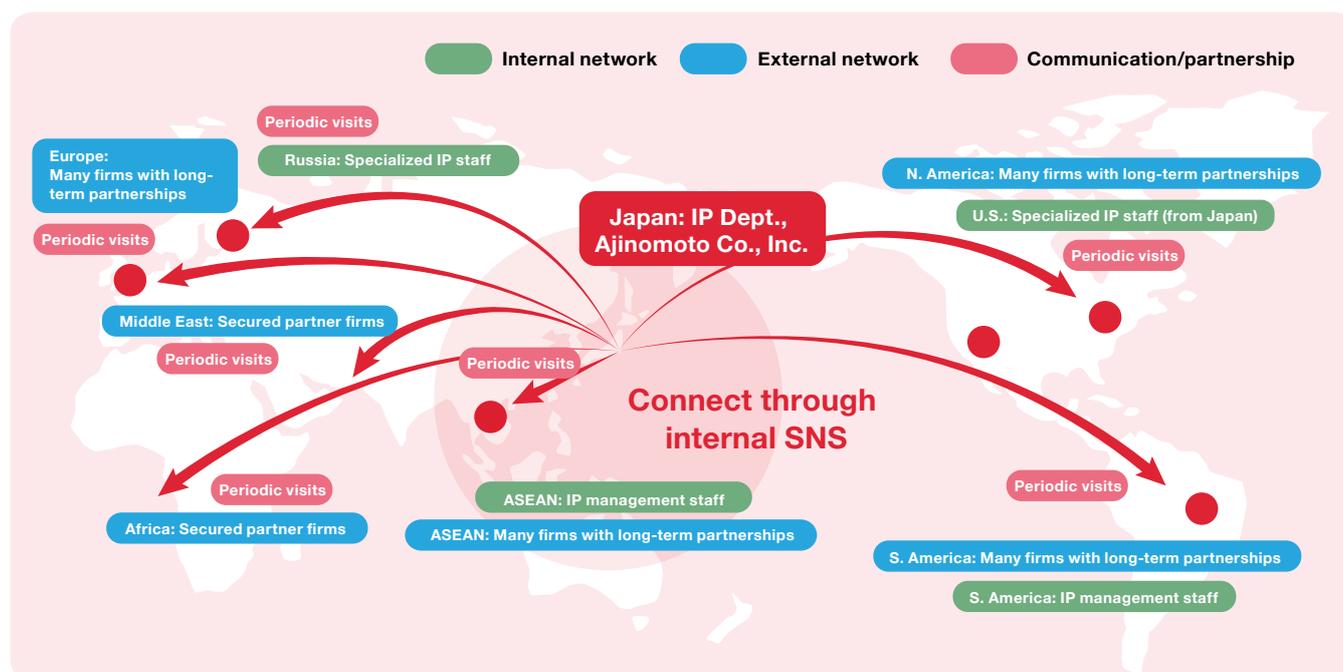
Reference →

Intellectual Property Information Disclosure
<https://www.ajinomoto.com/en/ir/library/intell.html>

IP management organization

The IP Dept. of Ajinomoto Co., Inc. supervises IP (patents, designs, trademarks, etc.) for the entire Ajinomoto Group in cooperation with related departments at group companies and in line with group policies on IP rights licensing and management. In addition, Intellectual Property Expert Co., Ltd., provides specialized services to the IP Dept. in the form of surveys, maintenance, and management of IP rights. Globally, the Group has resident staff in Virginia, U.S., specialized staff in Moscow, and key persons designated at companies in ASEAN and South America, and works with patent law firms with whom they have long-term partnerships. The three bases in Japan, the U.S., and Russia cooperate to secure strong patent rights, particularly in biotechnology.

Ajinomoto Group IP management organization



■ Impact of Ajinomoto Co. Inc.'s patents on other companies' patents

In the course of its patent examinations in 2016, Patent Result Co., Ltd. (based in Taito-ku, Tokyo) compiled the number of patents in each industry that were cited as reasons for rejection of another company's patent and announced its 2016 ranking of capability to prevent other food industry companies from obtaining patent rights (right chart). Companies with a large number of patents cited are advanced companies with extensive prior art that blocks other companies from obtaining rights. Ajinomoto Co., Inc. tops these rankings.

The Ajinomoto Group takes a firm stance toward companies that infringe on its IP rights, by providing warnings and filing infringement lawsuits, for example.

■ Trademark education

The Ajinomoto Group regularly conducts trademark seminars at group companies in Japan and overseas to give employees basic knowledge on trademarks and the rules for displaying trademarks such as *AJI-NO-MOTO*[®]. They serve both to enhance employee appreciation of trademarks and to prevent the *AJI-NO-MOTO*[®] trademark from being used as a generic term. A total of 120 employees from Ajinomoto Co., Inc. and group companies in Japan attended the seminar in fiscal 2016.

■ Rewards program for inventions

Ajinomoto Co., Inc. and its group companies strive to contribute to human health globally by continually creating unique value that benefits customers. The company is working to protect and effectively utilize IP rights, including original technologies, content, and brands, in order to strengthen its technological expertise.

The company also actively encourages invention, and has established a rewards program for inventions in compliance with the patent law as an incentive.

The company pays monetary reward for employee inventions that are filed as a patent application or registered as know-how, and again when registered as a patent. It also pays monetary reward when inventions are implemented by the company, and a special reward linked to company profits when their business contribution is particularly great. Most group companies that produce inventions have implemented similar programs.

■ Initiatives to protect trade secrets

Ajinomoto Co., Inc. established a committee with the aim of protecting trade secrets from leaks. The committee monitors trade secret information management and discusses improvement plans. An assessment by an external organization also drew out issues, which will be used to set up an organizational and human management base, and build a physical technological model to prevent trade secret leaks.

Going forward, the committee will extend the initiative to group companies as well.

■ Capability to prevent other food industry companies from obtaining patent rights (2016)

Rank	Company name	Number of patents cited
1	Ajinomoto Co., Inc.	353
2	Kirin Holdings Company Limited	243
3	Meiji Holdings Co., Ltd.	183
4	Japan Tobacco Inc.	178
5	Asahi Group Holdings, Ltd.	152
6	Suntory Holdings Limited	149
7	FUJI OIL HOLDINGS INC.	147
8	MEGMILK SNOW BRAND Co., Ltd.	136
9	Nisshin Seifun Group Inc.	115
10	The Nisshin OilliO Group, Ltd.	114

*Company names are based on the announcement by Patent Result Co., Ltd.

Human Rights

Respect for Human Rights throughout Our Business

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P67 Identification of Human Rights Issues and Awareness Raising

- Continuing dialogue on human rights issues
- Identification of human rights risks
- Formulation of human rights policy
- Enhanced human rights promotion framework
- Human rights awareness training of employees
- Considerations of human rights in business activities

P70 Human Rights Initiatives in the Workplace

- Human rights in employment

Related company policies

- **Ajinomoto Group Principles**
<https://www.ajinomoto.com/en/activity/policy/>

- **Ajinomoto Co., Inc. Supplier CSR Guidelines**
https://www.ajinomoto.com/en/activity/policy/supplier_csr_guidelines.html

Fiscal 2016 activity highlights

- Established Human Rights Advisory Committee

Business Conduct Committee

Human Rights Advisory Committee

Secretariat:
Global Human Resources Dept.

- Corporate Planning Dept.
- Global Human Resources Dept.
- Legal Dept.
- Global Communications Dept.
- Group Procurement Center
- General Affairs & Risk
- Management Dept.
- Business Strategy & Planning Dept. (Food)
- Overseas Foods & Seasonings Dept.
- Business Strategy & Planning Dept. (AminoScience)

→ P68

- Conducted food defense audits, reviewed and proposed on labor conditions and human rights



→ P69

- AJINOMOTO BAKERY CO., LTD. received the Shizuoka Prefecture Governor's Award in recognition of the promotion of employment for persons with disabilities



→ P70

Identification of Human Rights Issues and Awareness Raising

The Ajinomoto Group is clarifying policies in line with the human rights section of the Ajinomoto Group Principles (AGP). The Group is implementing the principle of “Value People” as articulated in the Ajinomoto Group Mission and Ajinomoto Group Way, and undertaking initiatives on a range of human rights topics that society expects global corporations to address.

Continuing dialogue on human rights issues

A lecture and discussion was held in April 2016 on the subject of global human rights, featuring Miwa Yamada of the Institute of Developing Economies in Japan. She spoke about the latest trends in business and human rights, as well as recent topics in Asia. The subsequent discussion covered specific examples of human rights risks in Asia and the status of responses to those risks.

In June 2016, Ajinomoto Co., Inc. participated in a stakeholder engagement program in Thailand, jointly organized by the Caux Round Table and Marimo5 (Japanese company in Thailand). Various stakeholders, including government, NGOs, Thai and Japanese companies, gathered to talk about labor and human rights, with a focus on Thailand. One theme raised was that migrant workers from Myanmar, Cambodia, and Laos play an important role, accounting for 10% of the Thai economy, but they face labor and human rights-related issues.

In March 2017, a discussion was held with David Kovick, Senior Advisor at NPO Shift, which advocates for implementation of UN Guiding Principles on Business and Human Rights. There followed a fruitful exchange of information on latest global human rights initiatives, and views on issues such as the development of UN Guiding Principles within a company, especially the implementation of human rights due diligence.



Dialogue session in April 2016



Stakeholder engagement program in Thailand in June 2016

Identification of human rights risks

In advancing a due diligence process for human rights, the Ajinomoto Group first conducted a basic survey to identify risks comprehensively. General risk categories in each country/region were first identified, followed by risks specific to the food industry. More than 100 cases of human rights risks that have surfaced in the value chains of other companies, primarily global companies, were then compiled, bringing clarity to the key human right risks the Group potentially faces.

When reviewing its materiality map based on SDGs in August 2016, the Ajinomoto Group decided to survey human rights experts and related NGOs to review the most urgent areas and revise the materiality map.

Human rights risks closely associated with the food industry

Labor

- Child labor
- Poor labor management (overwork, unpaid wages, and inadequate health and safety practices)
- Human trafficking

Water

- Adverse impacts on the health of surrounding residents, caused by factors such as increased water stress due to the impacts of climate change, population growth, and the like

Potential human rights risks by value chain segment



Formulation of human rights policy

Ajinomoto Co., Inc. has been respecting human rights in accordance with the Ajinomoto Group Principles (AGP). To deepen the understanding of staff in each division about a range of human rights issues that global corporations are expected to address, and to assess the current state of its human rights initiatives, every division was surveyed in 2012 based on ISO 26000. The results confirmed that there are no serious problems.

The Ajinomoto Group recently revised the AGP to supplement content on the global human rights issues that corporations are now expected to address, and in August 2014, established a new section on human rights to clarify its policy.

Furthermore, the Group also included human rights in the scope of its responsibility for the value chain, upgrading its efforts to address human rights as a global corporation. In the value chain, the Group urges and works with suppliers to address issues. For consumers, the Group recognizes that its business has a significant impact on human life and health and the natural environment and ecosystems. Efforts are made to deliver very safe products, and to carry out advertising and marketing activities responsibly, using fair and appropriate language, especially toward children.



Reference

Ajinomoto Group Principles & Policies
Ajinomoto Group Principles (AGP)

Enhanced human rights promotion framework

In 2011, Ajinomoto Co., Inc. replaced its former Human Rights Promotion Committee with a Human Rights Advisory Committee to advance human rights activities mainly in Japan. Having adopted the UN Guiding Principles, the company strengthened the Human Rights Advisory Committee functions in 2017 to address the broad range of human rights that society demands of corporations and implement the UN Guiding Principles. The Global Human Resources Dept. serves as the Committee secretariat, bringing together related divisions to extend consideration and promotion of human rights at a broader global level, and strengthen human rights management through due diligence.

Human rights promotion framework

Business Conduct Committee



Human rights awareness training of employees

Each group company worldwide promotes understanding of the AGP, which prohibit any form of discrimination or harassment. Human rights awareness training is provided to group employees around the world.

AGP worksite meetings are held every year to support employees in identifying and resolving issues in the workplace. In fiscal 2016, the discussions focused on human rights and used a subsidiary's Internet commercial as material for deepening employees' understanding of prejudice and harassment. The discussions were held at all affiliates in Japan by the end of fiscal 2016.

Ajinomoto Co., Inc. is committed to preventing workplace harassment. It performs assessments of all workplaces and regularly surveys all employees and compiles their opinions and examples into a workplace harassment casebook for all employees. To promote awareness, the company solicits ideas for human rights slogans from its employees and their families in Japan. In 2016, 2,718 people entered 4,086 slogans.

The Ajinomoto Group will keep working to foster human rights awareness among all employees.

Slogan chosen for the 2016 Award of Excellence by Industrial Federation for Human Rights, Tokyo

Some people have it so tough, they can't find the words.

Be sensitive. Be proactive. Be supportive.

(Kazue Isohata,
Sano Gift Factory,
Ajinomoto Packaging Inc.)

Reference

Organizational Governance P53
HOTLINE for whistleblower and harassment advisory service

Considerations of human rights in business activities

The Ajinomoto Group works hard to respect human rights across the value chain. The Group carries out quality, environmental and various other assessments when constructing a new plant or office, and when launching a new product or business. By evaluating the impact on people and the local community, the Ajinomoto Group is working to advance its human rights initiatives.

The Ajinomoto Group Basic Purchasing Policy clarifies that the Group confirms anything it directly purchases has no connection to the infringement of human rights, including child labor and illegal employment, across the value chain. Accordingly, the Group requires its raw material suppliers to cooperate in the effort to protect human rights. In fiscal 2013 Ajinomoto Co., Inc. issued and commenced operation of the Supplier CSR Guidelines, which explicitly state this requirement. Going forward, the guidelines will be sequentially introduced at Ajinomoto Group companies in Japan and overseas.

Further, the revised AGP clearly states expectations regarding human rights, labor, the environment, prevention of corruption and the other topics that are listed in the Ajinomoto Group Basic Purchasing Policy.

Reference

Ajinomoto Group Principles & Policies
Ajinomoto Co., Inc. Supplier CSR Guidelines

Reference

Fair Operating Practices P57-58
Ajinomoto Group procurement policy

Supplier CSR Guidelines (excerpt)

2. Respect for Human Rights with Due Consideration Given to Occupational Health and Safety

Suppliers are requested to respect the human rights of all employees based on a genuine understanding of the international community, to treat employees with dignity, and to provide a safe and comfortable work environment.

2-1. Prohibiting Forced Labor

All forms of forced labor and the imposition of activities against an individual's will are strictly prohibited.

2-2. Prohibiting Child Labor

It is vitally important to understand the destructive nature of child labor and to strictly prohibit the employment of children below the legal age.

2-3. Prohibiting Discrimination

Steps shall be taken to respect the statutory and regulatory requirements as well as cultures of each country and region. Discrimination in connection with employment opportunities, recruitment, promotion, and compensation with respect to any and all persons on the basis of race, ethnicity, nationality, religion, principles, origin, gender, age, and disability is prohibited.

2-4. Prohibiting Inhumane Treatment and Harassment

Every effort must be made to respect the human rights of employees and to eliminate sexual as well as power harassment, including all forms of mistreatment, punishment, psychological coercion, and verbal abuse from the workplace.

2-5. Appropriate Salaries and Wages

Steps shall be taken to pay appropriate wages and salaries to employees in accordance with all related laws and regulations, including the minimum wage, overtime, and statutory benefits.

2-6. Appropriate Management of Working Hours

Steps shall be taken to ensure that employees' working hours do not exceed those limits prescribed under relevant laws and regulations, and that non-working days and holidays are managed in an appropriate manner.

2-7. Employees' Right to Organize

The right of employees to organize as a method for facilitating discussions between management and labor with respect to such issues as working conditions and wage levels shall be respected.

Column

Food defense audits also review labor conditions and human rights, propose improvements

Ajinomoto Frozen Foods Co., Inc. has audited its supplier regularly not only on quality but also on labor conditions and human rights, and has enhanced risk management particularly in the shrimp aquaculture industry. Since 2008, the company has also continued with audits focused on food defense^[1] for all of its suppliers, with countries including Japan ranked by priority and China as the top priority. The food defense audits include a review of labor conditions and human rights at raw material suppliers.

A food defense audit typically focuses on the physical aspects of food security to prevent "food terrorism," such as intentional tampering with a hazardous substance. However, Ajinomoto Frozen Foods Co., Inc. also audits human aspects of security, including whether workers have a safe working environment, whether there is sufficient communication with managers, and whether the human rights of workers are respected. Based on the concept that "Enabling workers to do their jobs with enthusiasm determines quality," Ajinomoto Frozen Foods Co., Inc. will continue to audit labor conditions and human rights and to propose improvements, as part of its food defense audits.



[1] Measures to prevent intentional tampering with products. Monitoring is carried out at every stage from raw material procurement to product sales, in order to prevent anyone from adding poisons or other substances to food products.

Human Rights Initiatives in the Workplace

The Ajinomoto Group welcomes people of all nationalities to become its employees, recognizing that diversity supports the future of the Group. All employees are provided with fair opportunities to develop and exercise their abilities. The Ajinomoto Group strives to respect human rights, as stated in the Ajinomoto Group Way, while also working to protect and promote human rights in the workplace based on the Ajinomoto Group Principles (AGP).

Human rights in employment

■ Reemployment system for retirees

Ajinomoto Co., Inc. has been providing a reemployment system for all staff and managers at the mandatory retirement age of 60 since April 2006. In fiscal 2016, approximately 59% of retiring employees made use of the system. The company also established a system, which went into operation in April 2014, to foster career autonomy and help diversify career options for managers.

Each group company in Japan has updated its own reemployment system accompanying the enforcement of Japan's revised Act on Stabilization of Employment of Elderly Persons in April 2013. They all provide career support after the mandatory retirement age.

■ Employment of more persons with disabilities

In June 2016, the employment rate for persons with disabilities at Ajinomoto Co., Inc. was 1.95%, almost the same as in the previous year. For the Ajinomoto Group companies in Japan^[2], the rate was 2.07%, as a result of identifying new tasks to create workplaces where persons with disabilities are able to work proactively.

To date, Ajinomoto Co., Inc. has employed several persons with physical disabilities each year in the pursuit of diversity. In November 2016, the company established Ajinomoto Mirai Inc., a dedicated firm for the employment of persons with disabilities that opened for business in April 2017 with 11 staff (nine of whom have intellectual disabilities). The employees' main task is cleaning and administrative support for the offices in the Keihin area. Ajinomoto Mirai Inc. will continue to focus on providing work for persons with intellectual disabilities, and creating a rewarding workplace where persons with disabilities feel that they are contributing to society and the Ajinomoto Group.

Ajinomoto Mirai Inc. is scheduled to apply for certification as a special-purpose subsidiary under the Law for Employment Promotion of People with Disabilities during fiscal 2017.

The Ajinomoto Group will further advance its initiatives for employing persons with disabilities, actively expand employment opportunities, and promote diversity.

Reference

Ajinomoto Group Principles & Policies
Ajinomoto Group Principles (AGP)

Reference

Labor Practices P88
Personnel and Labor-Related Data

Reference

Human resources development (Japanese)
<http://www.ajinomoto.com/jp/recruit/fresh/education.html>

[2] The 28 major group companies in Japan that have 50 or more employees and are legally required to employ at least one person with a disability.

TOPICS



AJINOMOTO BAKERY CO., LTD.: the Shizuoka Prefecture Governor's Award for the promotion of the employment for persons with disabilities

AJINOMOTO BAKERY CO., LTD. develops and sells frozen bread and bakery products, and is also a proactive employer of persons with disabilities. To structure a system to accept these people, the management department in charge of hiring cooperated with the production department where employees with disabilities work. Through this system, the ratio of employees with disabilities increased from 1.7% in 2010 to 3.76% in 2016.

These efforts were recognized when the company received the Shizuoka Prefecture Governor's Award on September 16, 2016.



Receiving award: Futoshi Miyamoto (right), President of AJINOMOTO BAKERY CO., LTD.

Labor Practices

Better Careers, Higher Job Satisfaction for All Employees

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- Diversity and work-life balance

P73 Driving Diversity Forward

- Global HR system for realizing “Right Person for Right Position”
- Women’s empowerment at Ajinomoto Co., Inc.

P76 Work Style Innovation

P78 Career Development Support: Promoting Self-Directed Career Development

P79 Health and Productivity Management

P81 Employee Safety

- Implementation of a medium-term plan for occupational safety and health
- Occupational safety and health management
- Occupational safety and health activities
- Preparation for natural disasters to protect human life

P88 Personnel and Labor-Related Data

Related company policies

● Ajinomoto Group Principles

<https://www.ajinomoto.com/en/activity/policy/>

● Ajinomoto Human Resource Values

https://www.ajinomoto.com/en/activity/policy/human_resource_values.html

● Ajinomoto Group Occupational Safety and Health Policies

https://www.ajinomoto.com/en/activity/policy/occupational_safety_and_health_policies.html

● Ajinomoto Group Disaster Management Basic Policies

https://www.ajinomoto.com/en/activity/policy/disaster_management_basic_policies.html

Scope of the personnel and labor-related data

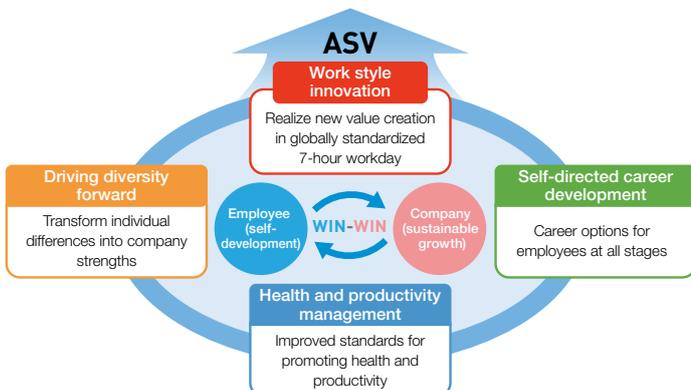
The personnel and labor-related data of this section covers Ajinomoto Co., Inc. and its consolidated subsidiaries (38 in Japan, 54 overseas) as of March 31 2017.

Definitions of terms

Employees	Directly employed management, non-management and contract staff
Temporary staff	Directly employed contract and temporary staff, including part-time employees
Executive	Directors, auditors, advisors, executive officers or a higher position (excluding part-timers)
Management	Employees in the position of section manager, a position equivalent to section manager, or a position higher than section manager (excluding executives)

Fiscal 2016 activity highlights

● A Fulfilling Place to Work



→ P72

● Global HR system for realizing “Right Person for Right Position”



→ P73

A Fulfilling Place to Work

The Ajinomoto Group aims to be a place where people can build fulfilling careers, allowing both employees and the business to grow together. This shared growth is what we believe. We will drive progress in meeting the goals of the Ajinomoto Group Creating Shared Value (ASV) and becoming a “Genuine Global Specialty Company.”

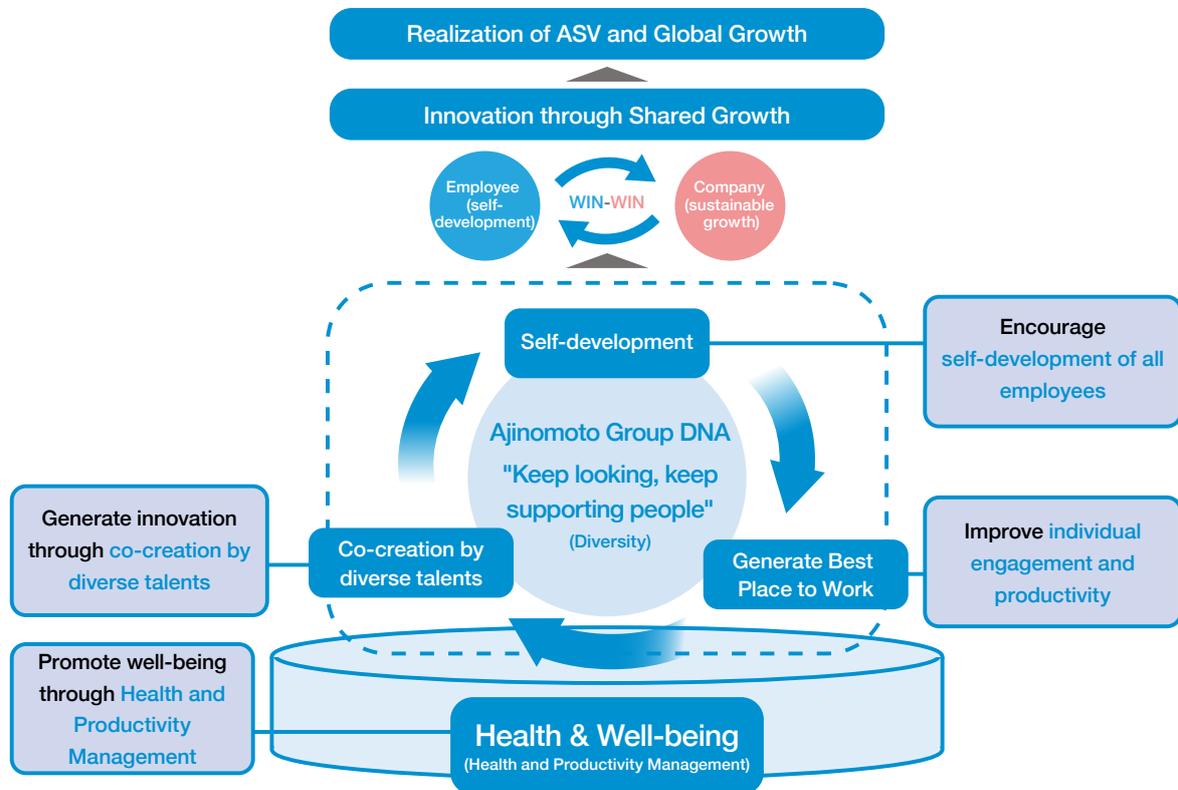
Diversity and work-life balance

The Ajinomoto Group is advancing diversity and work-life balance (WLB) to achieve the aims of improving individual engagement and growing the company sustainably. Based on shared values embodied in the Ajinomoto Group Way^[1], these efforts are aimed at fostering and harnessing the varied strengths of a diverse workforce toward continuous innovation and ASV^[2] expansion.

[1] Ajinomoto Group Way's basic approach to work, outlined as common values shared throughout the Group: create new value, pioneering spirit, social contribution, and value people

[2] ASV efforts linked to the creation of economic value and growth by contributing to the resolution of social issues through the businesses which the Ajinomoto Group has been conducting since its establishment to create value together with society and local communities

Basic policy on global human resource management



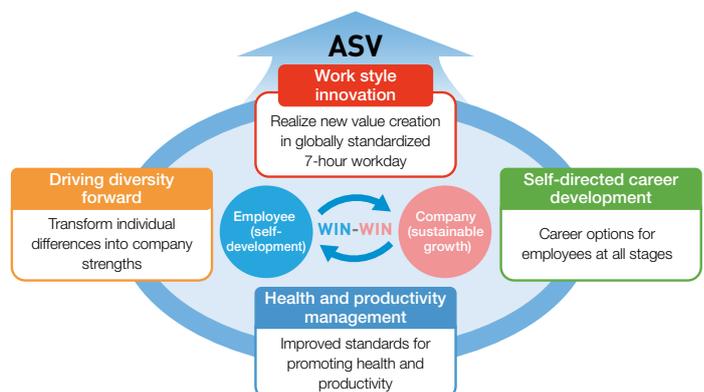
Workplace policies at the Ajinomoto Group

The Ajinomoto Group implemented four key policies to promote diversity and WLB: driving diversity forward, work style innovation, self-directed career development, and health and productivity management.

Reference →

Special Feature 3 P45-46

Inclusiveness in the Workplace



Driving Diversity Forward

The Ajinomoto Group is working to cultivate a diverse, vibrant workforce through strategic training and promotions that, while supporting professional success across various nationalities, genders, skills and values, result in profit-generating efficiency and a deeper pool of diverse, world-class talents.



Global HR system for realizing “Right Person for Right Position”

The Ajinomoto Group's global human resources management system is a common platform used by group companies to develop and promote diverse leadership and achieve “Right Person for Right Position.” This system is composed of talent management and position management to clarify key talents and positions.

In fiscal 2016 and beyond, the Ajinomoto Group will accelerate development of the next generation of top management by applying this system. We will create a pool of diverse talents of whom will be essential for functioning as a global specialty company.



Fiscal 2016 global HR managers meeting

Global HR management system

Position management (right position)

Clarifies roles in the organization and defines requirements for each position to execute business strategy.
Determines responsibilities of each position and competencies needed to accomplish them.

Job Grade	Apply job-based grading
Appraisal	Apply behavior evaluation and individual performance appraisal based on Ajinomoto Group Way
Compensation	Set up global compensation policies 1. Abide by relevant regulations in each country 2. Apply “pay for job” and “pay for performance” 3. Apply competitive compensation level based on local market level

Talent management (right person)

Assigns and promotes the right person to the right position to develop talent. Enables early promotion of high potential talent.

HR committees	HR committees organized on local and regional levels
Talent portfolio	Apply past year’s individual performance and future leadership competencies Identify future leadership competencies based on the future goals of each affiliated company
Succession plan	Identify key positions and candidates at each affiliated company
Development plan	Define each talent’s development plan

Various systems for global HR development

The Ajinomoto Group provides training programs to support every employee in his or her professional growth. In addition to organizing the Ajinomoto Group Way and ASV Sessions, which enable employees to deepen their understanding of shared values. The Group also provides cross-regional, division-specific, rank-based, elective and leadership programs for managers and other employees.



Ajinomoto Group Way and ASV Sessions: Translating the Group's shared values into practice

The Ajinomoto Group has been holding sessions since fiscal 2011 to promote deeper understanding of the Ajinomoto Group Way. As of year-end fiscal 2015, all group employees have taken the sessions. ASV Sessions were begun in fiscal 2015. Participants learn about ASV while also personalizing the Group's mission to address social issues through business, and reflecting on the inherent value of their work and being part of the Group. All employees of Ajinomoto Co., Inc. have taken the ASV Sessions as of year-end fiscal 2015, and nearly all employees of affiliated companies in Japan will take the sessions by end of September 2017. The Group aims to have all of the roughly 33,000 group employees worldwide take the sessions by year-end fiscal 2017.



Global leadership training

In addition to company- and division-specific training programs, the Ajinomoto Group also provides group-standardized leadership training for future leaders. This training for developing global managers is not based on age or rank but on job grade, preparing each employee for the next step in their career.

Managerial job grades

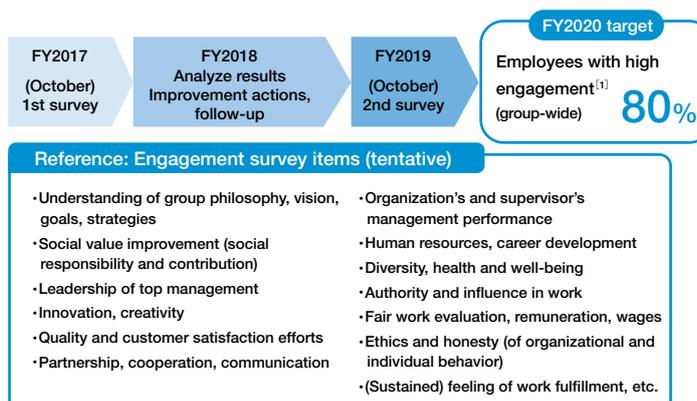


Major training programs for developing leaders

Training	Participants	Frequency and duration	Number of participants	Content
Executive Coaching	Officers, Group Executive Managers	14 sessions a year (1 hour/session)	Approx. 15 people	Individual coaching and assessment for top management
Ajinomoto Global & Group Leader Seminar (GGLS)	Job Grade 1	· Module 1: 3 days (7 hours/day) · Draft presentation: 1 time (2 hours) · Module 2: 2 days (7 hours/day)	Approx. 25 people	Action learning about global issues faced by the Group, presentations to the HR Committee
Ajinomoto Global Future Leader Seminar (AGFLS)	Job Grade 2	5 days (7 hours/day)	Approx. 15 people	Training to establish authentic leadership and enhance influence to take initiatives of the future direction
Ajinomoto Group Leader Seminar (AGLS)	Job Grade 2	5 days (7 hours/day)	Approx. 25 people	Self-assessment, review and planning of individual objectives as a leader (for managers in Japan only)
Ajinomoto Regional Leader Seminar (ARLS)	Job Grade 3	· North America Division: 5 days (7 hours/day) · Europe & Africa Division: 5 days (7 hours/day)	Approx. 20 people	Self-assessment training sessions on coaching and cross-cultural communication (held for each region)
Ajinomoto Global Future Leader Seminar Junior (AGFLS—Jr.)	Administrative	· Module 1: 5 days (7 hours/day) · Coaching: 2 sessions · Module 2: 4 days (7 hours/day)	Approx. 15 people	Training to build self-awareness and core values as a leader

Global engagement survey

To strengthen the organization and improve business performance, in October 2017 the Ajinomoto Group will begin a global engagement survey of the roughly 33,000 regular employees of its roughly 100 group companies. The survey, to be conducted once every two years, will serve as an indicator of the 80% "employees with high engagement," a non-financial target in the Group's 2017-2019 medium-term plan.



[1] A measure of the percentage of employees who feel that the company is creating value to address social issues and they personally are contributing to that value creation.

Women's empowerment at Ajinomoto Co., Inc.

Ajinomoto Co., Inc. aims to be the No.1 company where women as well as men can achieve their full potential. The company is implementing various initiatives to provide career-building opportunity and develop their career within the Group. In fiscal 2015, it established the Ajinomoto Women's Council as an organization tasked with accelerating women's empowerment in the workplace.

Management proposal

The Ajinomoto Women's Council submitted a proposal to executive members identifying the challenges confronting working women and ideas for solutions. Based on the proposal, the Ajinomoto Women's Council presents a vision of diverse career paths for women, summarized in "career opportunities," "sustainable employment," and "engaged workplaces." Various HR programs are being revised and expanded based on the proposal.

Proposal outline	<p>The No.1 company where women as well as men can achieve their full potential.</p> <ul style="list-style-type: none"> • Sustainable employment Through progressive HR programs and systems, minimize resignations of employees who are highly motivated • Career opportunities Rewarding careers with real responsibilities that hone skills • Engaged workplaces Flat, inclusive, and open workplaces!
<p>For women: A company that incentivizes sustained employment</p> <p>For the company: Highly engaged, motivated women</p>	➔

Support for work-life balance

To foster a culture of diversity inclusive to women, Ajinomoto Co., Inc. provides networking opportunities designed to promote mutual learning, respect, and stimulation.

Examples of A-WIN events

Work-life balance seminar for new working parents

Participants	Men and women employees on or returning from childcare leave and their partners
Number of participants	14 couples (28 people)
Purpose	Support work-life balance by resolving anxiety about returning to work ("Will I be able to work and raise a child at the same time?" (mother), "I want to support her but I don't know how," (father)) and emphasizing the importance of teamwork in housework and childrearing.

Introduction of area application system

A more open and fair system was introduced that allows employees to declare their desired work location when, due to major life changes and for reasons due to work location, they are compelled to quit their job but want to continue working.

Eligible reasons:

To live with spouse, provide child or nursing care (except for nursing care, spouse must also be working)

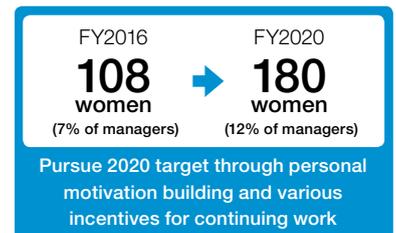
Example:	An employee who joined the company for a regional position at Osaka Branch marries her partner who lives in Tokyo. The employee requests a transfer to the Tokyo area and is given a position at the Tokyo Branch.
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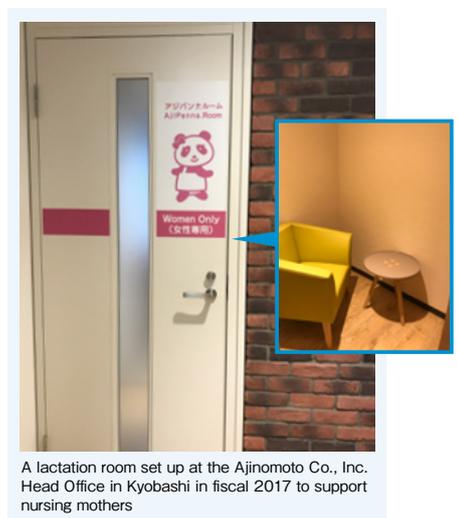
Careers section of the Ajinomoto Co., Inc. website



Women in management



Participants in the work-life balance seminar



A lactation room set up at the Ajinomoto Co., Inc. Head Office in Kyobashi in fiscal 2017 to support nursing mothers

Work Style Innovation

Realizing a healthy balance between work and personal life for each employee is important to enable diverse talents to fully perform their abilities towards creating new value. Through the Work-Life Balance Improvement Project launched by company and employees in 2008, Ajinomoto Co., Inc. has taken concrete steps to promote understanding among employees and rethink how and where work is done. In fiscal 2014, WORK@A, a work style innovation project, was launched to boost productivity through telecommunicating and other IT-powered programs. With diversity efforts added to the project in fiscal 2015, the company is practicing zero-based work style innovation to support various ways of working regardless of individual time constraints.

Zero-based work style innovation

Ajinomoto Co., Inc. should aim to reach a seven-hour workday, the global standard, to become a “Genuine Global Specialty Company” with thriving diverse human resources. However at group companies in Japan, overtime work is common, a fact associated with low involvement in housework and childrearing among men. A transition should be made to a work culture that assumes leaving the office on time. To achieve work style innovation without being held back by the status quo, since fiscal 2016 Ajinomoto Co., Inc. has been implementing reforms in how work is managed and done.



Roadmap (Ajinomoto Co., Inc.)

	FY2015 (actual)	FY2016 (actual)	FY2018 (target)	FY2020 (vision)
Minimum daily work hours	7 hr. 35 min.	7 hr. 35 min.	7 hr. 15 min.	7 hr.
Average annual work hours	1,947 hr.	1,890 hr.	1,800 hr.	less than 1,750 hr.

20 min. shorter
15 min. shorter

FY2020 onward
 Japan average
1,800 hr.

Reforms in management

To fundamentally change work instead of following the status quo, top management must show leadership in changing company systems and rules. The directors of Ajinomoto Co., Inc. and other members took up work style innovation as a key theme in a project to reevaluate organizational systems, and have been making various changes since fiscal 2016.

- Targets set to improve productivity
 - To strategically improve productivity as a management strategy, the company created a new evaluation system for measuring progress. (2017-2019 (for 2020) medium-term management plan ⇒ performance evaluation targets for each organization ⇒ individual targets)
- Meeting reforms
 - The company also set rules to internally standardize meetings for improved quality and efficiency.

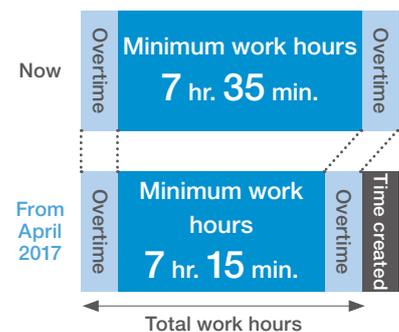
Examples

- ① Set rules for the meeting
- ② Revise meeting frequency and participants
- ③ Set standard meeting hours
- ④ Use web conferencing tools, go paperless, etc.

Reforms in ways of working

Ajinomoto Co., Inc. recognizes that moving beyond a work culture that assumes overtime requires a change in individual awareness about how to live and work. The company is striving to provide the conditions that allow flexibility in time and location so everyone can achieve WLB and maximize their productivity.

- Changing awareness
 - ① Shorten workday by 20 minutes
 - In April 2017, the minimum workday was shortened by 20 minutes. The company plans to cut an additional 15 minutes by fiscal 2020 to reach a seven-hour workday.
 - ② Move basic starting and closing times earlier
 - The company plans to make super flexitime the norm and move the basic starting and closing times earlier in the day. It also designated every Wednesday as “no overtime work day,” with headquarters turning lights out at 5 pm. To support morning work, it provides freshly baked bread and coffee free of charge. (Before: 8:45 am - 5:20 pm, From fiscal 2017: 8:15 am - 4:30 pm)





Introducing “Anywhere Office”

To create results and time, in April 2017 the company introduced “Anywhere Office,” a new program for which all employees are eligible. The program significantly loosens limits on telecommuting locations and frequency to support employees with various circumstances, such as child or family care responsibilities.

- Changed frequency limit from 2 to 4 times per week (no monthly limit)
- Contracted satellite offices, mainly in Tokyo metropolitan area

Ex. 1 Balance 7-hour workday with parenting



Ex. 2 Balance 7-day workday with nursing care



Systems offered by Ajinomoto Co., Inc. related to work-life balance

Systems or initiative	Details
Child care temporary retirement system	This system allows employees to take leave until the last day of April following the child's 1st birthday. A total of 15 days paid leave is provided.
Short time work for childcare	This system allows employees to take leave up to 2 hours and 30 minutes per day until the child enters the 4th grade of elementary school.
Child care Leave system	Employees with children who have not yet entered junior high school can take up to 10 days of childcare leave per fiscal year per child.
Nursing care temporary retirement system	This system allows employees to take leave up to 1 year to care for a spouse, parents, or family within the 2nd-degree of kinship whom the employee supports.
Short time work for nursing care	This system allows employees to take leave up to 2 hours and 30 minutes per day to provide care for certain family members until such care is no longer needed.
Accumulated Paid Leave system	A maximum of 40 days of accumulated paid leave can be taken to care for or visit in the hospital family members within 2nd-degree of kinship who are suffering from a non-work-related illness or injury, or who need care due to temporary school closure.
Hourly paid leave system	This system allows employees to take paid leave of up to 16 hours in hourly units per year (introduced in May 2014)
Anywhere Office	This system allows employees to work on eligible tasks at home or at a satellite office up to four days per week when approved by the company
Super flextime	Flextime system that does not set a timeframe in which working is required, aimed at supporting efficient fulfillment of work duties and improving WLB
WLB Leave system	This system allows employees to take three consecutive days of leave separate from paid leave (once per year)
Refreshment Leave system	This system allows employees to take rejuvenation leave of 9, 16, 30, and 16 days one time in the age ranges of 25–32, 33–40, 41–48, and 49–56, respectively.
Volunteer Leave system	This system allows employees to take volunteer leave of up to 8 days per fiscal year by employees qualified for volunteer work by an NPO, social welfare foundation, or other organization.
Area application system	Employees can request to work in a specific area due to childcare, family care, or other applicable reasons (global employees: no transfer, regional employees: transfer to area different from that when hired)
Re-employment system	Employees may register for re-employment in the event that retirement was unavoidable due to childbirth and newborn care, family and child care, or relocation because of marriage or spouse's job transfer.

Reference → Labor Practice P91
Personnel and Labor-Related Data

TOPICS

Ajinomoto awarded for work style innovation efforts

Ajinomoto Co., Inc. received the first award for “Enterprises and Workplaces with Pleasant Working Environment and High Productivity” in recognition of its efforts to support a diversity of work styles and reduce work hours by improving productivity through labor-management dialogue. The award honors companies that balance improvements in workforce productivity with job security and workplace development.



At the award ceremony

Career Development Support: Promoting Self-Directed Career Development

The Ajinomoto Group believes in supporting employees to develop and pursue their own vision of a fulfilling career. To that end, Ajinomoto Co., Inc. offers a range of career support programs to facilitate professional growth in addition to training.

HR initiatives to support the development of all employees

The Ajinomoto Group conducts cross-regional, division-specific training and various other training programs in each country and site.

Ajinomoto Co., Inc. has implemented and is promoting training programs so that employees can build their ideal careers. Programs are designed for each stage of employee growth, and fall into hierarchical training programs (new employee training, follow-up training, new manager training, etc.), elective programs (critical thinking, e-learning/ correspondence courses, management school), and global and group programs (internal training for developing leaders, external programs).



HR development programs at Ajinomoto Co., Inc.

Hierarchical training programs

Learning the standard abilities needed for each role/year

- ▶ Training for managers
- ▶ Training for non-managers

On-the-job training, site/division-specific training, promotions/transfers, evaluation sheet writing way and interviews, and career support programs

Awareness

Elective programs

Further improvement of core abilities and business skills

- ▶ Group training: Online training
- ▶ Correspondence education, e-learning programs, and career support programs

On-the-job training, site/division-specific training, promotions/transfers, evaluation sheet writing way and interviews, and career support programs

Enhancement

Division-specific training examples

- Compliance and legal training (P52, P63)
- Occupational safety and health education (P85)
- Environmental education (P117)
- Quality assurance training (P125)
- Sales training
- Marketing training
- Intellectual property and trademark training (P65)

Global and group programs

Faithfully following the Ajinomoto Group Way, having a broader perspective, and exerting skills

- ▶ Development program for global leaders
- ▶ Development program for regional leaders
- ▶ External programs

On-the-job training, site/division-specific training, and promotions/transfers

Further advancement

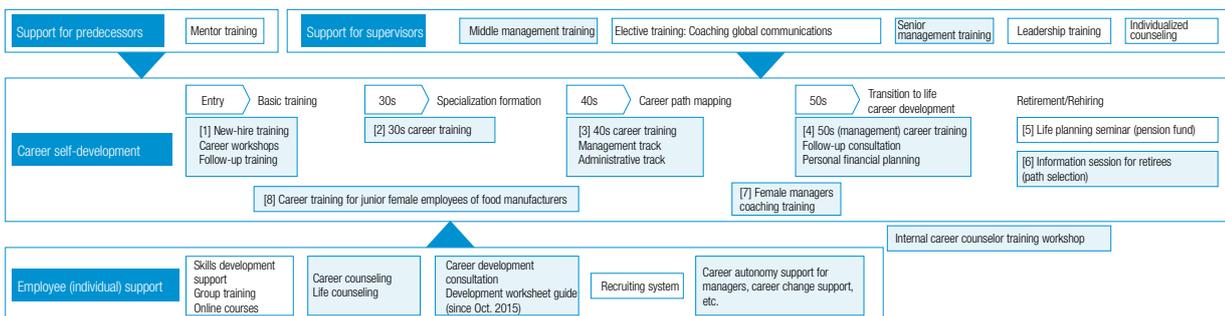
Career training at every stage

With personal values and work style preferences diversifying, employees should take more control in navigating their career path. Ajinomoto Co., Inc. is working to support employees in recognizing their strengths, values, and other qualities, developing their own vision and goals, and taking voluntary action to grow and achieve them. Focusing on “Best place to work” and “self development,” the company is providing more opportunities for employees to explore career development in and outside of the Group. Since fiscal 2015, its comprehensive career training program has offered these opportunities at key life stages. The program also includes training for new hires and coaching for newly appointed female managers.



Career Design Handbook distributed to all employees

Comprehensive career support structure



■ Enhancement of a career counseling system

Members of Ajinomoto Co., Inc.'s career support team strive to be trusted career consultants by obtaining qualifications in counseling, financial planning, and other fields. In the upper-middle career training for managers in their 50s, for example, they also provide opportunities to consult an outside career counselor. Personnel in the company's HR division, at each business site, and the general affairs departments of affiliated companies also receive training to increase their career counseling capability.



Counselors on the career support team, Global Human Resources Dept., Ajinomoto Co., Inc.

■ More support for career autonomy

In April 2016, Ajinomoto Co., Inc. expanded the eligible age range for using the career autonomy program it launched in 2014 to increase career options for managers. It also introduced an assessment service to the reemployment system to help senior employees find meaningful work after mandatory retirement.

These comprehensive efforts to support employees' career development earned Ajinomoto Co., Inc. the Grand Prize at the Fifth Japan HR Challenge Awards.^[1]

[1] The awards commend companies that have taken outstanding new initiatives in the field of human resources.



A career training session for employees in their 50s

Health and Productivity Management

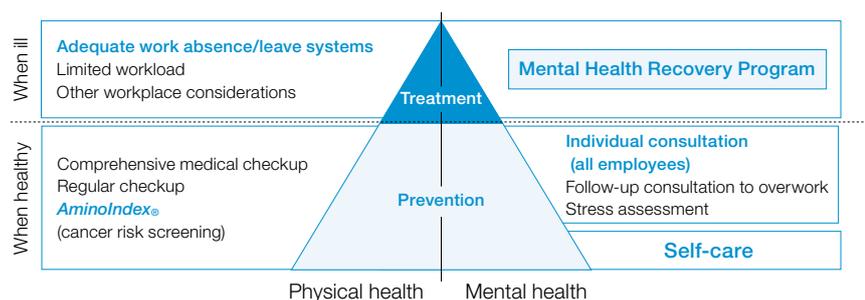
The Ajinomoto Group clearly states as a basic policy that wellness which allows employees to fully apply their skills is one of the most important resources for the business and society.

■ Self-care with a growing support system

Every company in the Ajinomoto Group is taking steps to help all of its employees maintain their physical and mental well-being.

Ajinomoto Co., Inc. is promoting employee health initiatives with a focus on the importance of good self-care. Since new employees, mid-career employees, and managers face different health issues, occupational health physicians offer training for each kind of employee. New managers and mid-career employees not only learn about health management, but also about specific ways to identify signs of health problems among subordinates and colleagues.

This self-care is supported at Ajinomoto Co., Inc. by a team of nine occupational physicians and 13 healthcare staff members, and at group companies in Japan by the Wellness Promotion Center of Ajinomoto Co., Inc.



■ Health promotion Organization at Ajinomoto Co., Inc.

9 occupational health physicians	13 healthcare staff members
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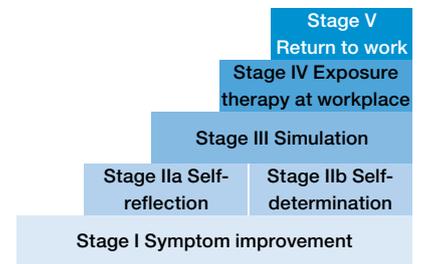
Individual consultations as preventive care

Ajinomoto Co., Inc. requires all employees in Japan to attend an individual consultation with a medical expert at least once a year. Medical experts provide appropriate health guidance based not only on checkup results but also on signs of physical or mental disorder that are difficult to detect via diagnostic testing. To prevent health disorder caused by work overload, the company strives to reduce overtime work while also providing direct medical guidance to employees who work more than a predetermined number of hours, based on standards that are safer than regulatory requirements. Employees on assignments outside Japan also have the results of their annual health checkups monitored by medical staff in Japan and receive follow-up guidance as well as health-related advice pertaining to immediate family members living with them.

Mental Health Recovery Program for lasting recovery

Ajinomoto Co., Inc. has introduced its own Mental Health Recovery Program to help employees with mental health challenges not only to heal but also to develop strong coping skills. This is pursued through an ample period of assisted self-reflection regarding one's personality and values, along with repeated simulations to train the mind for a return to the workplace. Targeting a relapse rate of less than half the societal average, the program actively strives to provide the conditions that will allow employees to function happily in their jobs, without the need for more leave.

Conceptual stages in Mental Health Recovery Program



Utilization of Ajinomoto products and services

Ajinomoto Co., Inc. has introduced *AminoIndex*® cancer risk screening, an Ajinomoto service shown effective in early detection of malignant cancer, as a test option in employees' regular health checkups. Some 90% of eligible employees have opted for the service, resulting in one case of early cancer detection and treatment.



TOPICS

Inclusion in the 2017 Health & Productivity Stock Selection

Ajinomoto Co., Inc. was included in the 2017 Health & Productivity Stock Selection for strategically promoting employee health and productivity from a management perspective. The selection is made by the Japanese Ministry of Economy, Trade and Industry (METI) and Tokyo Stock Exchange on a one-company-per-industry basis from TSE-listed enterprises. This fiscal year, 24 companies were chosen from roughly 3,600. In the same year, the company was also chosen in METI's 2017 Certified Health and Productivity Management Organization Recognition Program, which recognizes large enterprises (White 500) actively working in employee health management.



At the 2017 Health & Productivity Stock Selection press conference



Employee Safety

The Ajinomoto Group believes that disaster prevention and occupational safety and health are among its most important responsibilities based on Occupational Safety and Health Policies. Accordingly, the Group takes great care to ensure that employees can work securely in all of its workplaces.

In April 2017, the Group declared in its policies to “prioritize safety in everything.” While nothing new as an intention, such words were added to foster clear collective awareness. Expressions using “we” as the subject and other policy changes were also made to encourage more voluntary action on an individual level.

Implementation of a medium-term plan for occupational safety and health

Each day, about 30,000 employees of the Ajinomoto Group are hard at work all around the world. Every moment of every day poses the risk of occupational accidents, traffic accidents, health hazards, and natural disasters.

Based on the Ajinomoto Group Occupational Safety and Health Policies, the Group is working on safety and health education and the identification, evaluation, mitigation, and elimination of these risks. The goal is to reduce the number of occupational accidents to zero so all employees and others working at Group sites can work safely and in good health. To ensure a thorough execution of the safety and health policy, efforts have been made in line with the FY2014-2016 Ajinomoto Group Safety and Health Mid-Term Plan.

Key targets of the 2014-2016 plan

Eliminate serious caught/trapped-in accidents involving machinery	<ul style="list-style-type: none"> Identify the cause of caught/trapped-in accident risks involving machinery and implement the measures to reduce risks Implement comprehensive inspection of relevant equipment, implement safety measures for necessary equipment, thoroughly implement and continue hands-on safety training, etc. Continue operating Safety Management Program (SMP) at overseas packaging sites
Eliminate serious fall injuries	<ul style="list-style-type: none"> Implement safety measures to eliminate causes of fall accidents (leaks and spills of water, oil, powder, ice, raw materials, etc.) Thoroughly implement 2S (“Seiri” = tidy up, “Seiton” = put in order) activities Reduce human factors (e.g., implement activities to counteract motor faculty decline among middle-aged and senior employees)
Eliminate serious traffic accidents	<ul style="list-style-type: none"> Ascertain local road and traffic conditions and devise and implement appropriate preventive measures (reinforce use of seatbelts, helmets for motorcycle riders, etc.; ensure proper inspection and maintenance of vehicles; provide education and guidance using driving data management systems, etc., in sales fleet vehicles in Japan)

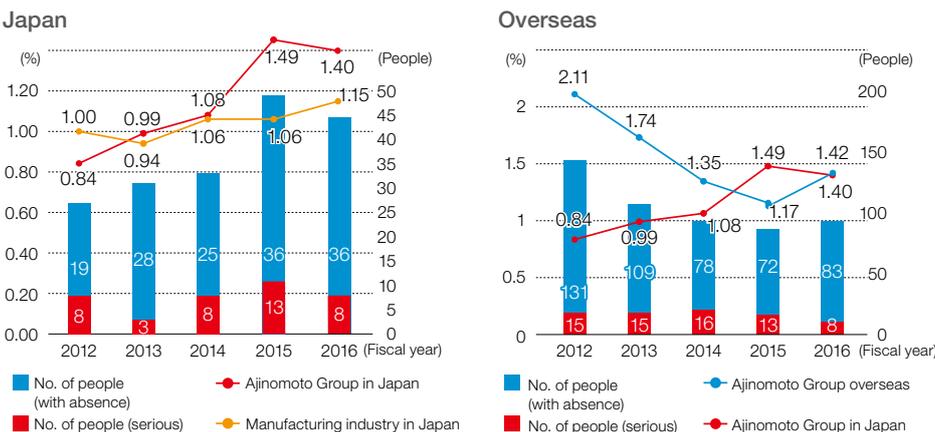
Review of fiscal 2016 results

*Including Ajinomoto Windsor, Inc. in Fiscal 2016 and onwards

- Accidents remain common across the Ajinomoto Group: despite a decline in the number of serious accident victims from the previous year, the number of victims of accident with absence was largely unchanged.
- In Japan, the number of serious accident victims decreased. However, following a fatal accident in the previous year, this fiscal year a serious accident occurred that resulted in the loss of physical function.^[1]
- Overseas, the number of serious accident victims declined.

[1] After completing equipment (conveyor) cleaning work, the employee was running the equipment to check for cleanliness (existence of remaining dirt) in the conveyor rollers. Finding dirt in the rollers, the employee proceeded to clean the equipment while it was still running (rollers rotating), whereupon the employee’s arm was caught in the machinery, resulting in serious injury. After the accident, the Ajinomoto Group shared examples of occupational accidents across the organization and reinforced comprehensive safety audits. To prevent recurrence of similar accidents, it also informed employees of safe distances between rotating parts and their safety guards (covers).

Frequency of serious accidents and accidents with absence, and number of accident victims



Ajinomoto Group definitions of occupational accidents

- Accident with absence: An accident causing a work-related injury that results in at least one absent day from the day after the injury
- Accident without absence: An accident causing a work-related injury that does not result in absent time
- Serious accident: A work-related fatal accident; accident with absence involving hospitalization and resulting in at least four absent days; or accident causing sequelae, such as the severing of a finger

Reference →
Ajinomoto Group Principles & Policies
 Ajinomoto Group Occupational Safety and Health Policies

■ Serious accidents and accidents with absence: being caught/trapped in machinery

Since fiscal 2015 the Ajinomoto Group has been implementing safety guidelines (original guidelines focused on tangible measures such as installation of safety covers) concerning areas of ancillary production work that pose a risk of getting caught or trapped in machinery, such as when washing equipment and removing clogs and residue. As a result, the number of caught/trapped-in accident victims trended downward. Nevertheless, in May 2016 a serious accident occurred wherein an employee's arm was trapped when cleaning equipment. In fiscal 2017, the Group will complete tangible measures and also work to ensure consistent identification of risks across the organization.

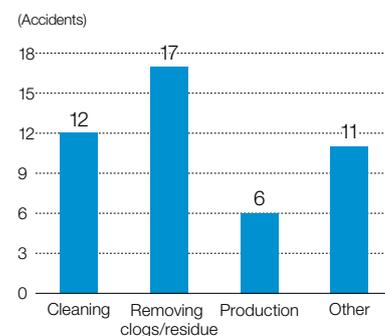
■ Number of caught/trapped-in accident victims

People, serious accidents in ()

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Japan	4 (0)	5 (1)	5 (1)	7 (4)	4 (1)	2 (1)
Overseas ^[2]	1	5	3	3 (2)	2 (2)	3 (0)

[2] Overseas figures include only serious accidents up to fiscal 2013, and both serious accidents and accidents with absence from fiscal 2014 onward.

■ Number of caught/trapped-in accidents by work type (FY2012–2016)



*This graph includes the accidents in the chart on the left as well as close calls in Japan.

■ Serious accidents and accidents with absence: fall injuries

In fiscal 2016 the Ajinomoto Group implemented comprehensive countermeasures to reduce the number of fall injuries following their rise in Japan in fiscal 2015. In addition to continuing the fall-prevention exercises, which seek to counteract the decline in the capability of movement among middle-aged and senior employees through self-assessments (recommended by the health insurance union), each site took creative actions, including installing handrails, fixing steps in aisles or converting steps into ramps, conducting patrols focused on fall prevention, and providing experiential education. As a result, while the number of fall injuries did not decline, the number of serious fall injuries began trending downward.

In fiscal 2017, the Group will step up efforts to reduce injuries by promoting facility improvements in addition to ongoing work and physical exercise-related efforts, and by conducting fall prevention seminars for managers.

■ Number of fall injuries

People, serious accidents in ()

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Japan	27 (3)	18 (2)	16 (0)	14 (2)	25 (5)	24 (2)
Overseas ^[3]	1	1	1	13 (3)	13	6 (1)

[3] Overseas figures include only serious accidents up to fiscal 2013, and both serious accidents and accidents with absence



Fall prevention exercises
(Kyushu Factory, Ajinomoto Co., Inc.)



Low back pain prevention training
(Ajinomoto Fine-Techno Co., Inc.)

■ Serious accidents and accidents with absence: low back pain

The incidence of occupational low back pain caused by strained physical movements is rising in the Ajinomoto Group. Actions taken to prevent these injuries include holding preventive exercise prior to work in the morning, and transporting heavy objects using assistive equipment. The Group has also begun assessing working posture using the OWAS method (Ovako Working Posture Analyzing System). Still, as the number of low back pain incidents is unchanged, in fiscal 2017 the Group will make tangible improvements as well.



Using a lift table
(AGF Kanto, Inc.)

Serious traffic accidents

The number of victims of serious traffic accidents during work commutes declined in fiscal 2016. However, one employee in Japan and one overseas died due to such accidents. The number of traffic accidents during work hours was unchanged from the previous year.

In Japan, sales branches in particular continued efforts to: 1) Raise driver awareness and motivation, 2) Upgrade equipment (install devices in vehicles), 3) Strengthen management capacity, and 4) Provide guidance to drivers and implement periodic awareness-raising measures using individualized data (driving data management system and results of driving aptitude test). They also held individualized training (for drivers with a history of accident or frequent risk-taking behavior) in addition to group training programs to prevent future accidents.

Since traffic circumstances vary by country, actions appropriate for each country are being taken overseas.



Guidance for sales staff on traffic accident prevention

Number of traffic accidents

	Accidents			
	FY2013	FY2014	FY2015	FY2016
Bodily injury accidents (Japan) ^[1]	21	21	9	9

[1] Number of traffic accidents causing bodily injury to other persons for Group companies in Japan only

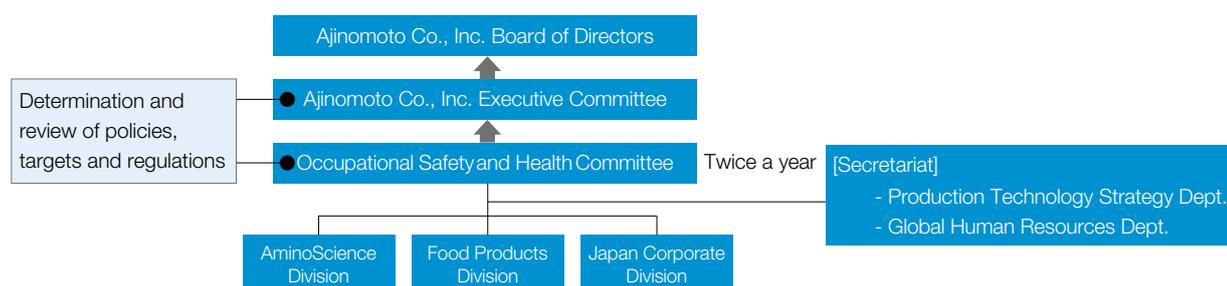
FY2017-2019 medium-term plan

The Ajinomoto Group will focus on preventing fall injuries and low back pain incidents as a priority theme for the fiscal 2017-2019 period. While intangible measures such as preventive exercises were the main focus through fiscal 2016, due to the continued frequency of occupational accidents and increasing severity of injuries (e.g., bone fractures), a comprehensive strategy will be undertaken that includes work infrastructure, work method, and employees' capability of movement.

FY2017-2019 medium-term plan

Prevent falls and low back pain	① Infrastructure 1) Reassess facility designs and workspaces to prevent strained work movements 2) Promote automation and use of assistive robots (required for new facilities, as necessary for existing facilities)
	② Work method 1) Strictly implement 2Ss (secure space for traffic and keep objects out) 2) Reinforce safe behaviors (e.g., stay calm, no rushing, no running) 3) Identify risk sources (e.g., water and material spills, steps) and implement countermeasures 4) Identify work/movement-related risk sources (strained postures, difficult tasks) and make improvements
	③ Capability of movement Always do stretching exercises (including radio exercises, fall/low back pain prevention exercises) prior to a work session.
Prevent caught/trapped-in accidents involving machinery	① Complete equipment measures by end of fiscal 2017 ② Always conduct checklist-based risk assessment and make improvements for new lines/equipment and work tasks

Occupational safety and health management structure



Occupational safety and health management

During the various activities performed at work every day, employees are always exposed to the risk that a moment of inattention could lead to a serious accident. The Ajinomoto Group has established an occupational safety and health system headed by its Executive Committee. Comprehensive measures are being carried out based on a group-wide plan to prevent accidents and disasters, including equipment inspections, audits, as well as education and assessment. The Occupational Safety and Health Assessment Series (OHSAS) is used for each safety management system, and PDCA cycles are also applied.

■ Safety and health assessments

The Ajinomoto Group conducts safety and health assessments to prevent occupational accidents. They are mainly conducted at the start of new product manufacturing, when stepping up production, changing manufacturing processes, developing new substances, and constructing or demolishing buildings, structures, and equipment. In addition to confirmation based on legal requirements or lessons learned from previous accidents, the Group carries out safety and health inspections at new plants. The actual deployment of workers in the traffic line and related factors are investigated to ensure that safe operations can begin. It also conducts risk assessments at each production site, identifying accident hazards in daily operations, evaluating the seriousness of potential accidents, and taking the needed prevention measures.

■ Safety audits and inspections

The Ajinomoto Group conducts internal audits at its companies and sites based on an occupational safety and health management system. The aim is to prevent accidents and violations of laws and regulations. In the event of a major accident at a group site, Ajinomoto Co., Inc. conducts on-site emergency safety audits, in order to investigate the causes of the accident, determine remediation measures, and prevent reoccurrence. Some sites in Japan bring outside perspectives into their safety and health activities, for example by having third-party consultants or institutions perform safety and health inspections. Ajinomoto Co., Inc. sites in Japan conduct reciprocal safety audits utilizing their respective strengths (expertise). The audits provide opportunities to the safety staff who perform them to increase their knowledge and learn about good safety practices.

■ Equipment inspection for safe and stable production

Plant equipment shall always be in a condition that ensures safe and stable production, and this requires preventive maintenance and inspections. Across the Ajinomoto Group, employees conduct careful daily maintenance of the equipment they use. In addition, while many production plants operate 24 hours a day throughout the year, production is periodically shut down completely to allow employees and specialists to inspect equipment for maintenance. As non-routine work, maintenance is potentially hazardous. Proper risk assessment and hazard prediction is conducted before starting maintenance work or restarting a process to ensure work safety. The Group has also worked to clarify safety expenditures to promote equipment safety measures.

■ Safety audits at new plants

Safety audits are conducted at plants built in new locations, and at plants that have joined the Ajinomoto Group through merger or acquisition. Since new plants have many new employees and build organizations from scratch, safety training and follow-up are conducted, in cooperation with related organizations. The aim is to establish zero-accident plants with management that complies with the policies and occupational accident prevention plans established by the Group.

■ Efforts to prevent occupational accidents

The Ajinomoto Group implements safety enhancement measures for the companies and worksites (designated worksites) which are considered high-risk (e.g., due to a recurrence of accidents or injuries) from a safety and accident prevention standpoint by the Chief of Safety & Disaster Prevention Promotion Headquarters. Designated worksites identify issues and prepare and implement an occupational accident prevention plan. A support team from relevant divisions organized by the Headquarters Secretariat periodically visits the site to confirm the proper functioning of a PDCA cycle, verify progress, and provide educational and technical assistance.

Column

Prevention of occupational accidents at overseas subsidiaries

After a series of occupational accidents, Amoy Food Ltd. has issued a leadership commitment and taken various actions on a workplace level to improve safety. These include workplace patrols, establishing a new safety and environment department, implementing small group activities (introducing a zero-accidents award program), holding hands-on safety training, and rigorously applying 5S practices. The company has also received management and technical support from Japan.

Occupational safety and health activities

Employee education

Routine, job-specific education and training is necessary to ensure safety for every employee. The Ajinomoto Group has a number of ongoing programs, including safety and health seminars and classes on new legal requirements for managers, as well as a management skills development seminar for manufacturing supervisors. Group companies also provide safety education suited to their particular operations, including hands-on training for each facility, and safety education for new employees using workplace-specific safety videos. In fiscal 2016, two new training programs were begun to improve safety management skills.



Education in fiscal 2016

People, cumulative in ()

Name of training	Details	Number of trainees
Fall-prevention seminar	Training leaders to introduce and promote fall-prevention measures directly in workplaces (one full-day course)	36 (179)
Occupational safety and health seminar for top management	Seminar for top managers at group companies in Japan to acquire the necessary safety and health knowledge (e.g., responsibility to consider safety) and to learn how to promote safety and health in a company (one full-day course)	55 (372)
Training for new internal auditors for OHSAS ^[1]	Basic education for checking PDCA cycles for the occupational safety and health management system and making recommendations for improvement (one two-day course)	23 (644)
Management skills development seminar	Workplace managers of group companies in Japan learn to understand the role and benefits of safety and health activities and improve their skills in fostering a workplace culture that prioritizes safety and health (one full-day course)	28 (55)
Seminar for safety managers (begun in FY2016)	Guidelines-based skills development education for those with safety management responsibilities (one full-day course)	20 (20)
Seminar for supervisors (begun in FY2016)	Guidelines-based skills development education for those with supervisory responsibilities (one full-day course)	24 (24)
Basic seminar for chemicals managers	Managers of operations involving chemical substances at group companies in Japan review the basic information on chemicals management (regulatory changes, risk assessment, safety data sheets (SDS), GHS labeling) and improve their management skills regarding safe chemicals handling (one full-day course)	30 (64)

[1] OHSAS is an international standard for occupational safety and health management systems.

Hands-on safety training

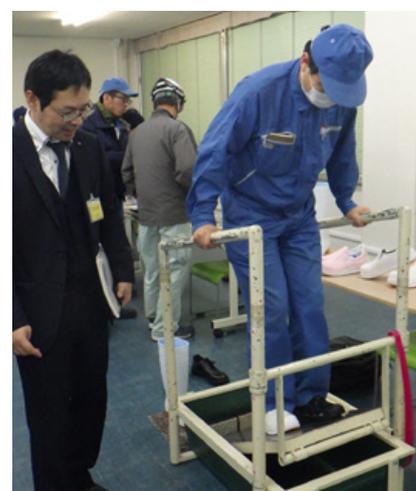
Ajinomoto Group worksites conduct a range of hands-on safety training programs. Examples of programs at different companies are shown below. The Ajinomoto Co., Inc. Tokai Factory also held a safety shoes fair to prevent fall injuries. With support from a safety shoe manufacturer, employees learned about and tried on shoes designed for different work environments.



Learning about impacts from falling objects (Ajinomoto Co., Inc. Kyushu Factory)



Learning about caught-in risks in crane rigging work (Ajinomoto Co., Inc. Kyushu Factory)



Safety shoe fair and an employee testing shoe traction (Ajinomoto Co., Inc. Tokai Factory)

External evaluation of occupational safety and health activities

The Ajinomoto Group has received a lot of awards for the safety and health activities that its employees carry out on a daily basis. The Group continues to ensure that accident prevention measures are taken at each site to reduce occupational accidents. These efforts will be expanded to include the activities of individual employees. By also working on accident and disaster elimination at group companies, these efforts will contribute to local communities.

Main awards received in fiscal 2016

Recipient	Details	Awarding institution
Yasuhiro Suetsugu Kyushu Factory, Ajinomoto Co., Inc.	Excellent Boiler Technician	Japan Boiler Association
Ajinomoto Labor Union R&D Chapter	FY2016 Kawasaki City Award for Excellence in Occupational Accident Prevention	Labor Affairs and Employment Department, Economic and Labor Affairs Bureau, Kawasaki City
Yuko Endo Kawasaki Administration & Coordination Office, Ajinomoto Co., Inc.	Award for Excellent Slogan in the Kawasaki City Occupational Accident Prevention Slogan Contest	Labor Affairs and Employment Department, Economic and Labor Affairs Bureau, Kawasaki City
Gunma Factory, Ajinomoto Fine-Techno Co., Inc.	Bronze Award, SME Zero Accidents Certificate	Japan Industrial Safety and Health Association
Tokachi Factory, Hokkaido Knorr Foods Co., Ltd.	SME Zero Accidents Progress Award (2nd grade record)	Japan Industrial Safety and Health Association
Process Support Division, Ajinomoto Packaging Inc.	Award for Excellence in the 52nd Kawasaki Occupational Accident Prevention Slogan Contest	Joint recognition (Kanagawa Bus, Trucking, and Taxi Associations)
Kanto Factory, Ajinomoto Packaging Inc.	Excellent Workplace in Fire Prevention Management	Kawasaki City Fire Department
Kiyofumi Takagawa AGF Suzuka, Inc.	Award for Distinguished Service	Mie Federation of Labor Standards Associations
AGF Suzuka, Inc.	Certificate of Appreciation	Suzuka Chief of Police
A Team (10 people) West Japan Sales Office, Kansai Ace Logistics Corporation	"Challenge 100" Zero Accidents & Zero Infractions Initiative	Hyogo Prefectural Police Headquarters, Hyogo Trucking Association
Headquarters, Kanto Ace Logistics Corporation	Award for Excellence in the Zero Accidents category of the FY2016 Kawasaki Commercial Vehicle Accident Prevention Slogan Contest	Kanagawa Trucking Association
Yasuko Matsumoto Atsugi Sales Office, Chuo Ace Logistics Corporation	Winner, Women's Division, National Truck Driver's Contest	Japan Trucking Association
Tetsuaki Tamura Nobuichi Kano Higashi-Ogishima Refrigerated Sales Office No. 1, Chuo Ace Logistics Corporation	Excellent Forklift Operator	Land Transportation Safety & Health Association Kanagawa Chapter

Preparation for natural disasters to protect human life

With top priority on protecting human lives, the Ajinomoto Group plans natural disaster preparation measures and conducts the necessary training and awareness-raising activities. This is based on the Ajinomoto Group Occupational Safety and Health Policies, as well as the Ajinomoto Group Disaster Management Basic Policies that are prescribed by its enterprise continuity plan (ECP).

Update of disaster preparedness

The Ajinomoto Group routinely collects information on natural disaster forecasting and damage prediction. It confirms the safety of buildings and production facilities and takes any steps needed, while also revising training.

The Ajinomoto Group has been strengthening its disaster preparedness in Japan, including the seismic testing and reinforcement of business facilities, based on earthquake and flood damage predictions from national and local governments. Placing top priority on protecting human lives, the Group incorporates preparedness measures selected by group companies and facilities into capital investment plans as necessary.

To strengthen large-scale disaster preparedness group-wide, secondary emergency response headquarters are set up at different sites in the event of a major natural disaster, and drills are being carried out. To prepare for the highly anticipated Nankai Trough earthquake, the disaster response network was strengthened by adding the functionality of the Kyushu Branch and Kyushu Factory (Saga prefecture), which has its own power generators and order center, in case the Osaka headquarters is rendered inoperable. In fiscal 2016 training was held to prepare for a scenario in which both Osaka and Tokyo headquarters are rendered inoperable by a massive earthquake.

Reference

Organizational Governance P50
Risk management system

Reference

Ajinomoto Group Principles & Policies
Ajinomoto Group Occupational Safety and Health Policies
Ajinomoto Group Disaster Management Basic Policies

Enhanced lines of communication for initial disaster response

Ajinomoto Co., Inc. introduced a system for inquiring about employees' safety in 2006 and keeps it up to date. Other group companies are also introducing similar systems, and system operation trainings are carried out periodically. During the 2016 Kumamoto earthquakes, it took the company just a few hours to confirm that employees were safe using this system.

When a major earthquake strikes, communication networks and other lifelines can be cut. Ajinomoto Co., Inc. has therefore set up an emergency communication system that uses satellite phones. These phones have been deployed at key locations and the homes of executive officers in Japan, and training is conducted periodically.

Emergency communication drills are also carried out periodically, based on a scenario in which a disaster occurs in the evening or on a holiday. Moreover, in fiscal 2014 the Group began operating a disaster information sharing system, a tool for rapidly collecting and confirming the disaster status of group companies and worksites, enabling more reliable communication in the wake of a disaster.



Launched promptly following a disaster, the emergency response headquarters gathers information on site conditions across the Group

Disaster drills

The Ajinomoto Group carries out disaster drills tailored to each region and business area. In addition to drills at individual sites, the Ajinomoto Group in Japan carries out group-wide disaster drills every September. The Group's emergency response headquarters gathers information on employee safety and site damage conditions from each group company and site, and gives instructions as needed.



Disaster response headquarters

Kawasaki Administration & Coordination Office



Emergency rescue drill

Tokai Factory



Firefighting drill

Kyushu Factory



Training for ammonia leak scenario

PT Ajinomoto Indonesia



Drills to prepare for leaks and fires at worksites that handle flammable solvents



Personnel and Labor-Related Data

Number of Ajinomoto Group employees

(persons)

	FY2016			FY2015			FY2014		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ajinomoto Group total	43,001	-	-	44,500	-	-	41,235	-	-
Employees	32,734	-	-	33,295	-	-	31,312	-	-
Management	4,488	-	-	4,803	-	-	4,520	-	-
Non-management	28,170	-	-	28,419	-	-	26,728	-	-
Contract staff	76	-	-	73	-	-	64	-	-
Temporary staff	10,267	-	-	11,205	-	-	9,923	-	-
Japan	15,595	-	-	16,986	-	-	16,042	-	-
Employees	9,450	7,281	2,169	10,425	8,042	2,383	9,388	7,155	2,233
Management	2,278	2,118	160	2,692	2,527	165	2,440	2,302	138
Non-management	7,096	5,113	1,983	7,660	5,467	2,193	6,884	4,810	2,074
Contract staff	76	50	26	73	48	25	64	43	21
Temporary staff	6,145	-	-	6,561	-	-	6,654	-	-
Ajinomoto Co., Inc.	3,898	2,623	1,275	3,912	2,633	1,279	3,940	2,633	1,307
Employees	3,459	2,449	1,010	3,477	2,473	1,004	3,484	2,478	1,006
Management	1,078	985	93	1,090	1,004	86	1,076	995	81
Non-management	2,305	1,414	891	2,314	1,421	893	2,344	1,440	904
Contract staff	76	50	26	73	48	25	64	43	21
Temporary staff	439	174	265	435	160	275	456	155	301
Group companies in Japan	11,697	-	-	13,074	-	-	12,102	-	-
Employees	5,991	4,832	1,159	6,948	5,569	1,379	5,904	4,677	1,227
Management	1,200	1,133	67	1,602	1,523	79	1,364	1,307	57
Non-management	4,791	3,699	1,092	5,346	4,046	1,300	4,540	3,370	1,170
Temporary staff	5,706	-	-	6,126	-	-	6,198	-	-
Overseas	27,406	-	-	27,514	-	-	25,193	-	-
Employees	23,284	-	-	22,870	-	-	21,924	-	-
Management	2,210	-	-	2,111	-	-	2,080	-	-
Non-management	21,074	-	-	20,759	-	-	19,844	-	-
Temporary staff	4,122	-	-	4,644	-	-	3,269	-	-
Asia	17,269	-	-	17,489	-	-	15,319	-	-
Employees	13,571	9,404	4,167	13,292	9,274	4,018	12,667	8,882	3,785
Management	1,153	820	333	1,106	764	342	1,051	744	307
Non-management	12,418	8,584	3,834	12,186	8,510	3,676	11,616	8,138	3,478
Temporary staff	3,698	-	-	4,197	-	-	2,652	-	-
Europe and Africa	2,887	-	-	2,897	-	-	2,589	-	-
Employees	2,479	1,931	548	2,468	1,961	507	2,499	1,982	517
Management	308	223	85	298	215	83	301	227	74
Non-management	2,171	1,708	463	2,170	1,746	424	2,198	1,755	443
Temporary staff	408	-	-	429	-	-	90	-	-
The Americas	7,250	-	-	7,128	-	-	7,285	-	-
Employees	7,234	-	-	7,110	-	-	6,758	-	-
Management	749	-	-	707	-	-	728	-	-
Non-management	6,485	-	-	6,403	-	-	6,030	-	-
Temporary staff	16	-	-	18	-	-	527	-	-

Local executives

(persons)

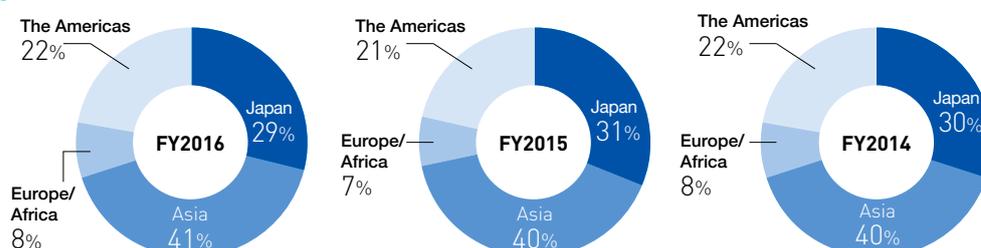
	FY2016	FY2015	FY2014
Overseas: Total executives	180	187	193
Local executives	79	78	78
Local executive ratio	43.9%	41.7%	40.4%

Ajinomoto Group employee ratio

Numbers in parentheses indicate male and female percentages.

	FY2016			FY2015			FY2014		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ajinomoto Group total	100%	-	-	100%	-	-	100%	-	-
Employees	76%	-	-	75%	-	-	76%	-	-
Management	10%	-	-	11%	-	-	11%	-	-
Non-management	66%	-	-	64%	-	-	65%	-	-
Contract staff	0%	-	-	0%	-	-	0%	-	-
Temporary staff	24%	-	-	25%	-	-	24%	-	-
Japan	100%	-	-	100%	-	-	100%	-	-
Employees	61%	(77%)	(23%)	61%	(77%)	(23%)	59%	(76%)	(24%)
Management	15%	(93%)	(7%)	16%	(94%)	(6%)	15%	(94%)	(6%)
Non-management	46%	(72%)	(28%)	45%	(71%)	(29%)	43%	(70%)	(30%)
Contract staff	0%	(66%)	(34%)	0%	(66%)	(34%)	0%	(67%)	(33%)
Temporary staff	39%	-	-	39%	-	-	41%	-	-
Ajinomoto Co., Inc.	100%	(67%)	(33%)	100%	(67%)	(33%)	100%	(67%)	(33%)
Employees	89%	(71%)	(29%)	89%	(71%)	(29%)	88%	(71%)	(29%)
Management	28%	(91%)	(9%)	28%	(92%)	(8%)	27%	(92%)	(8%)
Non-management	59%	(61%)	(39%)	59%	(61%)	(39%)	59%	(61%)	(39%)
Contract staff	2%	(66%)	(34%)	2%	(66%)	(34%)	2%	(67%)	(33%)
Temporary staff	11%	(40%)	(60%)	11%	(37%)	(63%)	12%	(34%)	(66%)
Group companies in Japan	100%	-	-	100%	-	-	100%	-	-
Employees	51%	(81%)	(19%)	53%	(80%)	(20%)	49%	(79%)	(21%)
Management	10%	(94%)	(6%)	12%	(95%)	(5%)	11%	(96%)	(4%)
Non-management	41%	(77%)	(23%)	41%	(76%)	(24%)	38%	(74%)	(26%)
Temporary staff	49%	-	-	47%	-	-	51%	-	-
Overseas	100%	-	-	100%	-	-	100%	-	-
Employees	85%	-	-	83%	-	-	87%	-	-
Management	8%	-	-	8%	-	-	8%	-	-
Non-management	77%	-	-	75%	-	-	79%	-	-
Temporary staff	15%	-	-	17%	-	-	13%	-	-
Asia	100%	-	-	100%	-	-	100%	-	-
Employees	79%	(69%)	(31%)	76%	(70%)	(30%)	83%	(70%)	(30%)
Management	7%	(71%)	(29%)	6%	(69%)	(31%)	7%	(71%)	(29%)
Non-management	72%	(69%)	(31%)	70%	(70%)	(30%)	76%	(70%)	(30%)
Temporary staff	21%	-	-	24%	-	-	17%	-	-
Europe and Africa	100%	-	-	100%	-	-	100%	-	-
Employees	86%	(78%)	(22%)	85%	(79%)	(21%)	97%	(79%)	(21%)
Management	11%	(72%)	(28%)	10%	(72%)	(28%)	12%	(75%)	(25%)
Non-management	75%	(79%)	(21%)	75%	(80%)	(20%)	85%	(80%)	(20%)
Temporary staff	14%	-	-	15%	-	-	3%	-	-
The Americas	100%	-	-	100%	-	-	100%	-	-
Employees	100%	-	-	100%	-	-	93%	-	-
Management	10%	-	-	10%	-	-	10%	-	-
Non-management	89%	-	-	90%	-	-	83%	-	-
Temporary staff	0%	-	-	0%	-	-	7%	-	-

Group employees by region



Number of new hires, retention rate

(persons)

	FY2016			FY2015			FY2014		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Number of new hires: Total (new graduates + mid-career)	7,072	-	-	5,365	-	-	4,739	-	-
Japan	356	-	-	376	-	-	360	-	-
Ajinomoto Co., Inc.	107	75	32	66	45	21	112	67	45
New graduates	64	42	22	55	35	20	78	47	31
Mid-career	43	33	10	11	10	1	34	20	14
Management	6	5	1	3	3	0	7	5	2
Non-management	37	28	9	8	7	1	27	15	12
Group companies in Japan	249	-	-	310	-	-	248	-	-
Overseas	6,716	-	-	4,989	-	-	4,379	-	-
Asia	4,558	-	-	4,061	-	-	3,225	-	-
Europe and Africa	189	-	-	184	-	-	221	-	-
The Americas	1,969	-	-	744	-	-	933	-	-
Reference: Retention rate (3 years) for new graduates									
Ajinomoto Co., Inc.	95.0%	93.5%	100.0%	97.8%	96.4%	100.0%	97.3%	95.7%	100.0%

Number of retirees, turnover, re-employment

(persons)

	FY2016			FY2015			FY2014		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total number of retirees	7,674	-	-	5,469	-	-	4,611	-	-
Japan	422	-	-	416	-	-	335	-	-
Retired	154	-	-	161	-	-	116	-	-
Resigned for personal reasons	268	-	-	255	-	-	219	-	-
Ajinomoto Co., Inc.	118	89	29	83	58	25	81	56	25
Retired	60	48	12	44	33	11	33	27	6
Resigned for personal reasons	58	41	17	39	25	14	48	29	19
Group companies in Japan	304	-	-	333	-	-	254	-	-
Retired	94	-	-	117	-	-	83	-	-
Resigned for personal reasons	210	-	-	216	-	-	171	-	-
Overseas	7,252	-	-	5,053	-	-	4,276	-	-
Resigned for personal reasons, etc.									
Turnover^[1]									
Ajinomoto Co., Inc.	1.6%	1.6%	1.7%	1.1%	1.0%	1.4%	1.4%	1.2%	1.9%
Re-employed after retirement^[2]									
Japan	164	-	-	157	-	-	168	-	-
Ajinomoto Co., Inc.	35	-	-	23	-	-	23	-	-
Under re-employment program	4	0	4	0	0	0	4	0	4
Seniors (after retirement)	31	-	-	23	-	-	19	-	-
Group companies in Japan ^[3]	129	-	-	134	-	-	145	-	-
Reference: Number of employees registered in re-employment program (Ajinomoto Co., Inc.)									
Employees registered	52	2	50	52	2	50	50	1	49
Newly registered	7	0	7	11	1	10	8	0	8

[1] Only includes employees resign for personal reasons, Ajinomoto Co., Inc. only

[2] Japan only

[3] Total numbers

Number of personnel with disabilities (Japan only)

	FY2016	FY2015	FY2014
Employees (persons)			
Ajinomoto Co., Inc.	88	90	90
Group companies in Japan	219	238	206
Percent of workforce rate			
Ajinomoto Co., Inc.	1.91%	1.93%	1.93%
Group companies in Japan	2.14%	2.12%	1.91%

*For Group companies in Japan, numbers refer to 28 companies with 50 or more regular workers, among the 38 consolidated subsidiaries in Japan.

Employee statistics

		FY2016			FY2015			FY2014		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Average age										
Japan	Ajinomoto Co., Inc.	43.0	43.7	40.9	42.6	43.4	40.4	42.2	42.9	39.9
	Group companies in Japan	41.2	-	-	41.7	-	-	-	-	-
	Overseas	36.6	-	-	36.2	-	-	35.7	-	-
Average years of employment										
Japan	Ajinomoto Co., Inc.	19.4	20.0	17.8	19.1	19.8	17.3	18.7	19.3	16.7
	Group companies in Japan	13.9	-	-	13.9	-	-	-	-	-
	Overseas	8.9	-	-	8.8	-	-	8.7	-	-
Average annual salary^[1] (thousand yen)										
	Ajinomoto Co., Inc.	9,525	-	-	9,512	-	-	9,231	-	-

[1] Average for employees (excluding contract staff)

Working hours and employee usage of work-life balance and related programs (Ajinomoto Co., Inc. only)

		FY2016			FY2015			FY2014		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Working hours										
	Total actual working hours	1,889	-	-	1,947	-	-	1,996	-	-
	Average non-statutory working hours	126	-	-	166	-	-	161	-	-
	Average paid leave days	17.4	-	-	16.7	-	-	15.7	-	-
	Paid leave utilization rate	89.2%	-	-	85.6%	-	-	80.5%	-	-
Work-life balance (WLB) – Parenting leave program										
Number of users										
	Parenting Leave	157	32	125	123	10	113	119	7	112
	Part-Time Parenting and Work	182	0	182	164	1	163	181	2	179
	Childcare Leave	39	3	36	38	3	35	53	3	50
Usage ratio										
	Parenting Leave	-	25.5%	100%	-	6.6%	100%	-	4.6%	100%
	Average parenting leave usage days	-	27	332	-	14	262	-	22	251
	Reinstatement rate	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Work-life balance (WLB) – Related programs										
Number of users										
	Nursing care leave	14	5	9	10	6	4	11	6	5
	Nursing care temporary retirement	0	0	0	1	0	1	1	0	1
	Part-Time Family Care and Work	1	0	1	1	0	1	1	0	1
	Accumulated Paid Leave	104	41	63	83	27	56	84	27	57
	Telecommuting ^[2]	-	-	-	133	69	64	113	57	56
	Rejuvenation Leave	155	-	-	181	-	-	213	-	-
	Volunteer Leave	55	-	-	57	-	-	48	-	-

[2] Introduced in October 2014

Education and training (Ajinomoto Co., Inc. only)

	FY2016	FY2015	FY2014
Annual expenditures for education and training (million yen)	504	470	463

Safety and health (Ajinomoto Co., Inc. only)

	FY2016	FY2015	FY2014
Ratio of employees taking mental health leave	0.66%	0.72%	0.68%

The Environment

Our Contribution to Global Sustainability

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P94 Ajinomoto Group Zero Emissions Plan (AGZEP) and Fiscal 2016 Results

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- Management of fluorocarbons
- 3Rs of Waste: Fiscal 2016 performance overview

P99 Fiscal 2016 Input and Output Balance

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- Utilization of amino acids for eco-friendly agriculture

P104 Conservation of Ecosystems and Biodiversity

- Biodiversity approach and policies
- Initiatives for fisheries resources
- Initiatives for forest ecosystem resources, sustainable land use, local ecosystems

P109 Development of Environmentally Friendly Packaging

- Efforts to meet customer needs
- Organizations to improve containers and packaging
- Cooperation with outside organizations
- Implementation of environmentally friendly design of containers and packaging
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P113 Initiatives in Logistics

- Initiatives as a consignor
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- Group-wide environmental management
- Group-wide environmental management activities

P117 Environmental Education and Awareness Raising

- Specialized education and training
- Education and awareness-raising activities

Related company policies

● **Ajinomoto Group Principles**

<https://www.ajinomoto.com/en/activity/policy/>

● **Ajinomoto Group Environmental Policies**

https://www.ajinomoto.com/en/activity/policy/environmental_policies.html

● **Ajinomoto Group Biodiversity Policy**

https://www.ajinomoto.com/en/activity/policy/biodiversity_policy.html

Scope of the environmental report

This section of the report covers the environmental initiatives of the companies subject to the Ajinomoto Group Environmental Management as defined in the company's Environmental Regulations (fully subject to the regulations as of March 2017). These companies include Ajinomoto Co., Inc. and other group companies. Performance statistics are for the 111 major business sites (12 added and three eliminated following site reorganization as well as plant dissolution and new construction), which substantially represent the environmental performance of the entire Ajinomoto Group^[1] under the consolidated financial accounting system.

[1] The Ajinomoto Group refers to Ajinomoto Co., Inc. and its consolidated subsidiaries and group companies subject to financial reporting under the equity method.

Fiscal 2016 activity highlights

● **Set the Long-term Environmental Vision**

Together with communities and customers, the Ajinomoto Group contributes to the global environment through initiatives that are ahead of international targets, from manufacturing to consumption.



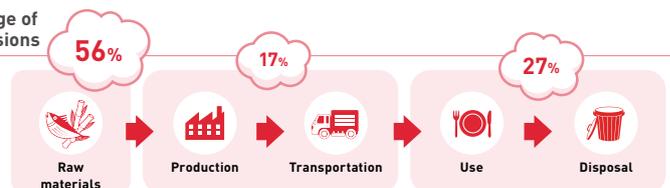
➔ **Special Feature 2 P28-30**

● **Assessed environmental impacts in Scope 1, 2, and 3**

The Ajinomoto Group's lifecycle assessments cover the environmental impact from headquarters, sales divisions, research centers, and other back-office sections. The Group compiles the Scope 1, 2, and 3 data to grasp overall environmental impact of its business.

Ajinomoto Group's environmental impact by life cycle assessment

Percentage of CO₂ emissions



➔ **P99-100**

Ajinomoto Group Medium-Term Environmental Plan

The Ajinomoto Group Medium-Term Environmental Plan is re-established every three years, and forms the basis for the Group's environmental initiatives. Activities were carried out based on the plan for fiscal 2014-2016.

What the Ajinomoto Group Aims for

The Ajinomoto Group contributes to issues facing human society—global sustainability and food resources—and helps create healthy lives through its business.

2014–2016 Ajinomoto Group Medium-Term Environmental Plan

Main objective	Priority points	FY2016 results (Final year of 2014-2016 Medium-Term Environmental Plan)	Reference
Business to Nature: Partnership with the earth			
Minimize emissions generated by business activities/ Promote the Ajinomoto Group Zero Emissions Plan	<ul style="list-style-type: none"> Implementation of a road map for each business site Completion of group-wide plans 	<ul style="list-style-type: none"> FY2016 AGZEP results <ul style="list-style-type: none"> At 20%, surpassed medium-term target for renewable energy use ratio. Contributing factors included upgrades and stable operation of biomass boilers outside Japan. Reduced per-unit CO₂ emissions 33%, falling short of 35% target. Causal factors included increased use of carbon-intensive energy sources due to technical problems, and decreased energy efficiency resulting from production changeovers and other operational circumstances at certain factories. Achieved targets for all other items. 	P94-100
Conserve biodiversity and use ecosystem services sustainably	<ul style="list-style-type: none"> Development of action plans for key raw materials that reflect careful, step-by-step assessment of the specific characteristics Development of action plans for local ecosystems that reflect careful, step-by-step assessment of the actual conditions 	<ul style="list-style-type: none"> Palm oil (Japan): Started consideration of action plans towards sustainable utilization by 2018 (AJICO, AGF, FFA^[1]); (overseas): Made a plan towards the realization of sustainable procurement in 2020. 	Special Feature 2 P39-40
		<ul style="list-style-type: none"> Paper: Promoted the adoption of FSC[®] certified paper for package materials at each company in Japan. Continued appealing to the industry and society via the Consortium for Sustainable Paper Use. 	Fair Operating Practices P61-62
		<ul style="list-style-type: none"> Joint Tagging Survey of Skipjack: Introduced the findings to the discussion among international resource management institutions and demonstrated survey methods using new tags. Began international partnership with Taiwan and project partnership with the Japan Science and Technology Agency. 	Special Feature 2 P40-41 P107-108
		<ul style="list-style-type: none"> Ajinomoto AGF, Inc., Forest of <i>Blendya</i>[®]: Conducted activities at Suzuka, Gunma, and Kyoto Kamigamo Shrine to protect forests and water resources with active participation of group employees. Bird Sanctuary: Regenerated a bird sanctuary at AJICO Tokai Factory based on the general conceptual plan. 	P105 P106
Business to Society: Partnership with society—Contribution to resolving environmental issues			
Contribute to the environment through business activities/ products/services	<ul style="list-style-type: none"> Efficient utilization of agricultural, forestry, and fishery raw materials Development of products and technologies that can replace agricultural, forestry, and fishery raw materials 	<ul style="list-style-type: none"> Promoted a range of activities at each group company and business in Japan. Container and packaging 3Rs: Used 100% recycled PET bottles for all key bottled coffee products (Ajinomoto AGF, Inc.); Adopted CO₂ absorbing packaging materials for the <i>Nabe Cube</i>[®] standing pouch (first in the industry). 	P111
		<ul style="list-style-type: none"> Sustainable logistics system: Established F-LINE CORPORATION in March 2017 to improve transportation efficiency and reduce CO₂ emissions. Reduction of food loss: Started to print the expiration by MM/YY to promote the extension of shelf life based on scientific evidence. 	Special Feature 2 P37-38
Promote information provision, social communication and collaboration with society	<ul style="list-style-type: none"> Enhanced communication with society on the Group's environmental initiatives in each business site 	<ul style="list-style-type: none"> Received various awards in recognition of the Group's efforts in social activities and communication. <ul style="list-style-type: none"> 42nd Awards for Resources Recirculation Technologies & Systems, METI Minister's Award 13th Eco-Products Awards, MAFF Minister's Prize (for feed-use lysine) MLIT Minister's Award under the 2016 Excellent Green Logistics Commendation Program (for building and operating the F-LINE project) 20th Environmental Communication Award (for Integrated Report 2016 & Sustainability Data Book 2016) Jury Committee Chair's Award, 4th Food Industry "Mottainai" Grand Prize (for Ajinomoto AGF, Inc., Kyushu Factory of Ajinomoto Frozen Foods Co., Inc., YAMAKI Co., Ltd.) Rated higher by international rating organizations than the previous year. <ul style="list-style-type: none"> Dow Jones Sustainability Index 2016 (environment, human resources, labor conditions, CSR, IR, etc.): Selected for World Index in the Food Products sector for the third consecutive year. Total score 85 (2015: 83). Same performance earned a bronze rating for the second consecutive year from RobecoSAM. CDP2016 climate change: B (2015: B); CDP2016 water: A- (2015: B); CDP2016 forests: palm oil A-, paper B, soy B, cattle no response. CDP 2016 supply chain management: climate change B, water A- 	Public Awards and Feedback
	<ul style="list-style-type: none"> Implementation of public evaluation for the Group's initiatives 	<ul style="list-style-type: none"> EcoPro 2016: Five group companies staged jointly at International Exhibition on Environment and Energy (AJICO, AGF, J-OIL MILLS, FFA, YAMAKI) Partnership with Kawasaki City and Kao Corporation: Conducted four-day program called "Summer Challenge," in which 21 pairs of Kawasaki City fifth graders and their parents took part in the Kawasaki Factory tour to learn its environmental efforts as well as <i>Eco-Uma</i> cooking and other workshops. Helped inspire contemplation of environmentally appropriate lifestyles, changes in participants behavior, and other outcomes. Environment-themed tour routes: Started at AJICO's Kawasaki and Tokai factories. 	Consumer Issues P135-136
Strengthen capacity responding to laws and regulations	<ul style="list-style-type: none"> Secured sources of information on legal amendments, both inside and outside the company 	<ul style="list-style-type: none"> Violation of laws/accidents: 12 cases Complaints/inquiries: Three complaints from nearby residents 	P115-117
	<ul style="list-style-type: none"> Reliable operation of mechanisms to incorporate new information on legal amendments into management standards and procedures 	<ul style="list-style-type: none"> Legal training (Japan): Held five sessions of program based on previous year's questionnaire results. Promoted use of tools for providing information on Japanese legal amendments to group companies in Japan. 	
Improve the effectiveness of management	<ul style="list-style-type: none"> Improvement of competence in applying the PDCA cycle in EMS to business activities 	<ul style="list-style-type: none"> "ISO14001:2015": Continued systematic compliance at each group company. Ajinomoto group environmental audit: Implemented below based on the guidelines. No major issues observed. <ul style="list-style-type: none"> (1) Documentary Audit: six companies (2) Environmental Audit: four companies 	P116-117

[1] Ajinomoto Co., Inc., Ajinomoto AGF, Inc., and Ajinomoto Frozen Foods Co., Inc.

Ajinomoto Group Zero Emissions Plan (AGZEP) and Fiscal 2016 Results

With the aim of minimizing environmental impact arising from its various business operations, in fiscal 2016, the entire Group worked harder to implement the AGZEP for 2014–2016 to bring the plan to a close. While checking progress via an annual performance review, the Group also revises the scope and targets whenever the plan is updated in order to further reduce impact.

AGZEP for 2014–2016

The 2014–2016 Ajinomoto Group Medium-Term Environmental Plan sets the targets shown below. Each business site established a roadmap and, based on it, engaged in activities to achieve the Ajinomoto Group's 2016 targets.



Conservation of Water Resources

Water use and discharge:

-70%

Discharged water per unit of production for the Ajinomoto Group in fiscal 2016 (compared to fiscal 2005)

- Targets were set to reduce high nitrogen concentrations and BOD components in wastewater from the production of amino acid fermentation-related products.
- For precious water resources, a target was set to reduce water use and discharge per unit of production at least 70% from fiscal 2005 levels, considering the operational risks that can arise not only from the amount of water used but also discharged.
- Business sites that use groundwater are studying issues related to local water sources and considering necessary actions.



Reduction of Greenhouse Gas Emissions

CO₂ emissions:

-35%

CO₂ emissions per unit of production for the Ajinomoto Group in fiscal 2016 (compared to fiscal 2005)

- Continuing from the 2011–2013 plan, a target was set to reduce greenhouse gas emissions per unit of production at least 35% from fiscal 2005 levels for the entire Ajinomoto Group worldwide, with a focus on CO₂ from fossil fuels.
- For production sites in Japan, a reduction target of 1% per year was set based on Japan's Energy Saving Act. This amounts to an 11% reduction in total CO₂ emissions in fiscal 2016 from fiscal 2005, bringing emissions down to 496 kilotonnes or less.

● Newly added target

A new target was set to increase the renewable energy use ratio (to at least 15% for the Group). The Group will utilize local biomass energy at business sites outside Japan, and strive to minimize energy use at all business sites worldwide.



3Rs of Waste

Resource recovery ratio:

99% or more

Resource recovery ratio for the Ajinomoto Group in fiscal 2016

● Revised target from previous plan

The indicators for waste volume reduction were reassessed and the target changed to “Zero waste caused by trouble”^[2] so that we can provide customers with good products that do not lead to waste.

- This will be implemented in all business segments through various efforts, including maintaining stable production, improving processes (saving resources, efficiency improvements), establishing and executing business plans to minimize waste of raw materials and packaging, and maintaining appropriate procurement and management of raw materials (in cooperation with suppliers).

[2] Including products, materials in process, and raw materials used in manufacture

Ajinomoto Group Zero Emissions Plan (AGZEP) and Fiscal 2016 Results

Key targets and results of the AGZEP for 2014–2016 * Including Ajinomoto Windsor, Inc. in fiscal 2016 and onwards.

	Item	Scope	Results			FY2016 targets to be achieved	FY2030 targets to be achieved
			FY2014	FY2015	FY2016		
Water resources	Biochemical Oxygen Demand, Total Nitrogen in wastewater	All production sites of the Group that directly discharge wastewater to public waterways	Target achieved at 27 out of 34 sites	Target achieved at 24 out of 32 sites	Target achieved at 22 out of 31 sites	BOD≤10ppm TN≤5ppm	BOD≤10ppm TN≤5ppm
	Water use per unit of production	All production sites of the Group	73% reduction	75% reduction	77% reduction	Reduce by at least 70% (compared to fiscal 2005)	Reduce by at least 80% (compared to fiscal 2005)
	Discharged water per unit of production	All production sites of the Group	75% reduction	79% reduction	80% reduction	Reduce by at least 70% (compared to fiscal 2005)	Reduce by at least 80% (compared to fiscal 2005)
CO ₂ emissions	CO ₂ emissions per unit of production	Entire Group (production sites + non-production sites)	28% reduction	33% reduction	33% reduction	Reduce by at least 35% (compared to fiscal 2005)	Reduce by at least 50% (compared to fiscal 2005)
	CO ₂ emissions	All production sites in Japan	351 kt	407 kt	446 kt	≤496 kt ^[1] (reduce by 11% compared to fiscal 2005)	
	Renewable energy use ratio	Entire Group (production sites + non-production sites)	15%	18%	20%	≥15%	50%
3Rs of waste	Resource recovery ratio (waste + by-products)	Entire Group (production sites + non-production sites)	99.4%	99.6%	99.3%	≥99%	≥99%
	Volume of waste (based on actual reports)	Entire Group (production sites + non-production sites)	1.248 kt	1.785 kt	0.964 kt	Zero waste caused by trouble	Zero waste caused by trouble

[1] Base year (2005): 558 kt

Reference

Special Feature 2 P28-30

Ajinomoto Group Long-Term Environmental Vision

Environmental award system for excellent business sites

The Ajinomoto Group is united in its efforts to minimize environmental impacts in all business areas. In order to provide additional incentive for such activities, business sites that have made the greatest contribution to achievement of the AGZEP are honored as “excellent business sites.”

“Excellent business sites” meet criteria such as establishing a roadmap and steadily promoting it, as well as achieving numerical targets. In fiscal 2016, two sites were honored in the production category, and one in the office category. Additionally, two factories that had achieved significant reductions in accidental waste received the Special Award for Waste Reduction Activities in recognition of their potentially long-term contributions.



Amoy Food Ltd.

List of sites awarded

	Business site	Main activities earning recognition
Production category	Sano Gift Factory, Ajinomoto Packaging Inc.	Reduced CO ₂ emissions through a detailed program that included converting warehouse and outdoor lighting to LEDs and raising employee awareness of energy saving.
	Bien Hoa Factory, Ajinomoto Vietnam Co., Ltd.	Stopped discharging wastewater to surface water, and promoted stable production and biomass boiler operation.
Office category	Research Institutes (Kawasaki), Ajinomoto Co., Inc.	Promoted energy saving by setting standards for energy management of facilities, HVAC, lighting, and office equipment. Reduced disposal of confidential documents through digitization.
Special Award for Waste Reduction Activities	Limeira Factory, Ajinomoto do Brasil Ind. e Com. de Alimentos Ltda.	Reduced waste from contamination by more than 80% by reducing manufacturing process loss and intensifying oversight of raw material suppliers.
	Amoy Food Ltd.	Reduced product disposal volume by more than 60% by promoting quality, production efficiency, and improvement of facility issues through a factory-wide PLV (Production Loss Visualization) initiative.



Limeira Factory, Ajinomoto do Brasil



Sano Gift Factory, Ajinomoto Packaging Inc.



Bien Hoa Factory, Ajinomoto Vietnam Co., Ltd.



Research Institutes (Kawasaki), Ajinomoto Co., Inc.

Conservation of Water Resources: Fiscal 2016 performance overview

In fiscal 2016 the Ajinomoto Group reduced water use and discharge by about 140 million tonnes each, and water use per unit of production by about 77%, compared to the fiscal 2005 baseline, thus achieving its target (at least 70% reduction).

Further reductions in water use were made from the previous year by using cooling tower water for indirect cooling applications, saving water during facility cleaning, and recirculating water on-site. Accordingly, discharged water also declined.

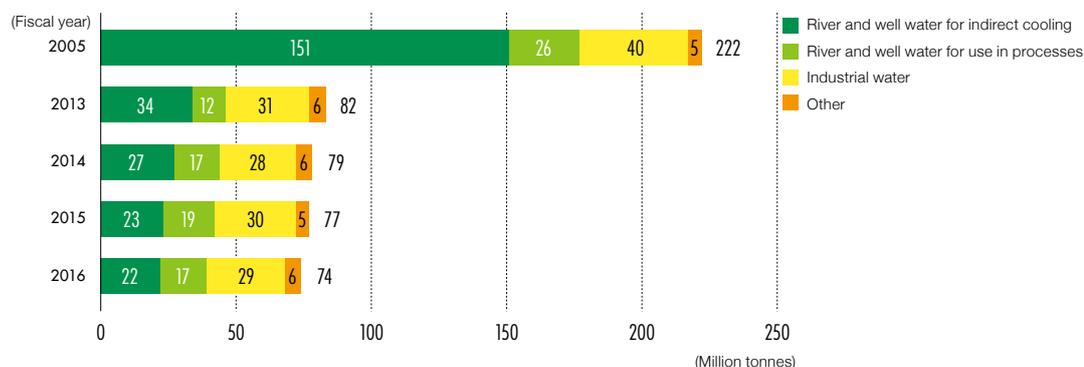
The Group aims to achieve its long-term target of reducing per-unit water use and discharge 80% by 2030 compared to fiscal 2005 levels through continuing efforts.

Water use

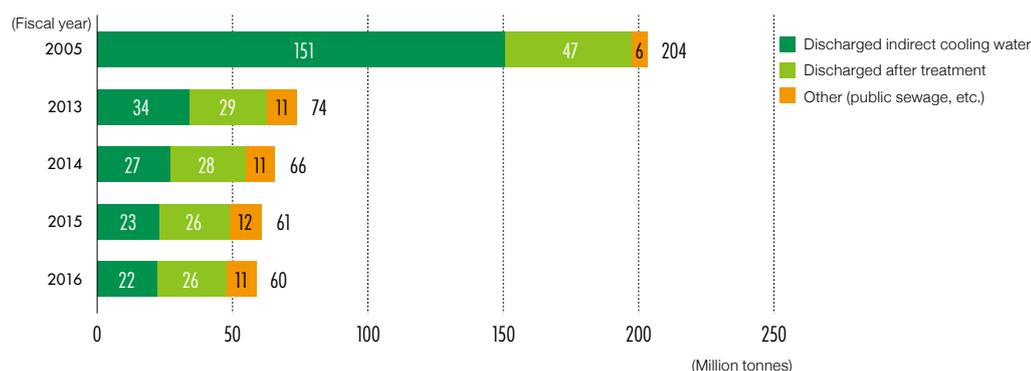
(Million tonnes)

	Base year		Results						
	FY2005	Ratio (%)	FY2012	FY2013	FY2014	FY2015	FY2016	Ratio (%)	Difference
Water use	222	100%	110	82	79	77	74	100%	-148
Japan		38%	46	34	30	32	27	36%	-57
Asia/Africa		37%	35	22	23	21	23	31%	-59
Europe		13%	14	13	11	11	12	16%	-17
North America		2%	5	5	5	5	6	8%	2
South America		8%	8	7	7	6	6	8%	-12
China		3%	1	1	1	1	1	2%	-5
Water used per unit of production (per tonne of product)	123	—	48	36	34	30	28	-	-
Reduction ratio of water use per unit of production	—	—	61%	71%	73%	75%	77%	-	-
Reference value: Production volume (10 kilotonnes)	180	—	230	226	235	253	266	-	-

Water use



Discharged water



Reduction of Greenhouse Gas Emissions: Fiscal 2016 performance overview

Despite progress in installing biomass boilers at business sites outside Japan, per-unit emissions in fiscal 2016 remained unchanged from the prior year, down 33% from the base year, falling short of the target. Contributing factors included technical problems and increased use of carbon-intensive energy sources to stabilize factory operations, temporary declines in energy efficiency due to product change-overs, and the Group's addition of factories that produce high-performance but carbon-intensive products.

To achieve its target to halve per-unit greenhouse gas emissions from business activities by 2030 compared to fiscal 2005, the Group will continue to maintain stable operation of biomass boilers in consideration of securing supplies of low-impact energy sources. It will also continually improve energy efficiency at each factory by developing and introducing energy-saving processes based on specific business characteristics.

Total CO₂ emissions and CO₂ emissions per unit of production

(10 kilotonnes)

	Base year		Results						
	FY2005	Ratio (%)	FY2012	FY2013	FY2014	FY2015	FY2016	Ratio (%)	Difference
Total CO₂ emissions	236	100%	224	220	221	223	233	100%	-3
Japan	58	25%	42	39	40	45	47	20%	-11
Asia/Africa	87	37%	94	93	97	104	106	46%	19
Europe	33	14%	26	23	22	17	18	8%	-16
North America	23	10%	33	35	36	35	43	18%	20
South America	20	9%	19	19	18	14	11	5%	-9
China	14	6%	10	10	9	8	8	4%	-6
CO₂ emissions per unit of production (per tonne of product)	1.31	—	0.97	0.97	0.94	0.88	0.88	-	-
Reduction rate of CO ₂ emissions per unit of production	—	—	26%	26%	28%	33%	33%	-	-
Reference value: Production volume	180	—	230	226	235	253	266	-	-

Shift to clean energy

Energy input increased along with increased production in fiscal 2016, but energy use per tonne of product was largely unchanged from the previous year. Further analysis shows that the medium-term target for the renewable energy use ratio continues to be met at 20% (2% year-over-year increase). This was made possible by the stable operation of biomass boilers at factories in Thailand, Vietnam, and Brazil, and the introduction of a biomass cogeneration system in Thailand. Going forward, all sites worldwide will work to minimize energy use by ensuring stable production and promoting the development and introduction of resource and energy-saving processes. They will also aim for a renewable energy use ratio of 50% by 2030 by introducing renewable energy sources, such as installing biomass and purchasing renewable energy.



Input of clean energy

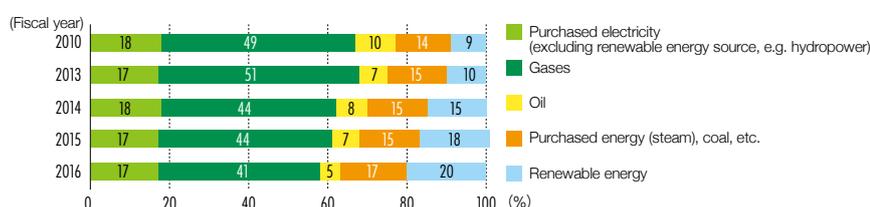
	FY2012	FY2013	FY2014	FY2015	FY2016
Input of clean energy (TJ)^[1]	35,669	35,342	36,356	37,362	39,105
Energy input per unit of production (per tonne of product)	15.5	15.6	15.5	14.8	14.7

[1] TJ: terajoule, T (tera) = 10¹²



Bien Hoa Factory, Ajinomoto Vietnam Co., Ltd.

Energy use at the Ajinomoto Group (thermal equivalent)



Reference →

Special Feature 2 P32

Target 50% renewable energy use by 2030

Management of fluorocarbons

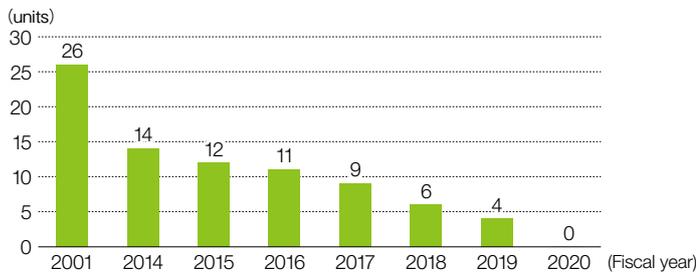
The Ajinomoto Group uses fluorocarbons as refrigerants for chillers. The AGZEP for 2014–2016 included goals for discontinuing the use of CFCs^[2] and replacing chillers that use HCFCs^[3] and HFCs^[4] with models that use natural refrigerants. A re-inspection revealed that the complete discontinuation of CFCs was not achieved at certain facilities. These facilities will continue proper management, and also establish and implement new action plans in the next medium-term environmental plan to achieve complete discontinuation. All seven factories in Japan, including those of affiliates of Ajinomoto Frozen Foods Co., Inc., converted to natural refrigerants in 21 units by the end of fiscal 2016, and plan to switch the remaining nine units over to non-fluorocarbon equipment by the end of fiscal 2020. The Ajinomoto Group is leading the industry by introducing new technology that combines the use of two refrigerants (ammonia and CO₂).

- [2] Chlorofluorocarbons, or "specified fluorocarbons."
Manufacture of CFCs, which are ozone-depleting substances, was banned in developed countries in 1996 under the Montreal Protocol.
- [3] Hydrochlorofluorocarbons, or "designated fluorocarbons."
Manufacture of HCFCs, which are ozone-depleting substances, will be phased out in developed countries by 2020 and in developing countries by 2030 under the Montreal Protocol.
- [4] Hydrofluorocarbons. HFCs do not destroy the ozone layer and are known as CFC alternatives. Due to their global warming potential, which is thousands of times higher than CO₂, reduction of HFC emissions is included in the Kyoto Protocol targets.

Web

Cooperation with the Consumer Goods Forum
<http://www.theconsumergoodsforum.com>

Number of owned freezers containing CFCs, HCFCs and HFCs (Ajinomoto Frozen Foods Co., Inc.)



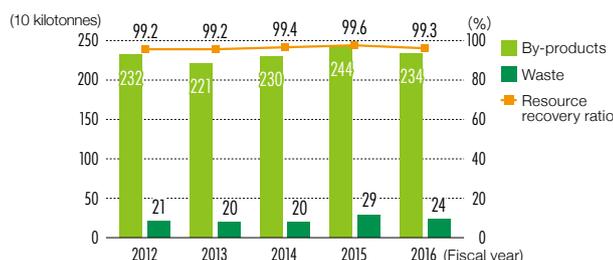
3Rs of Waste: Fiscal 2016 performance overview

The Ajinomoto Group is working to minimize waste to ensure optimal use of all resources. The Group is also committed to effectively utilizing waste and by-products, with the aim of recovering 99% of it as resources. In amino acid production, the Group utilizes by-products as resources and seeks to improve production efficiency by introducing new technologies. In food production, it is also making a range of efforts, such as improving the precision of sales forecasts and conducting fine-tuned procurement, to minimize wasted raw materials and the amount of packaging materials used.

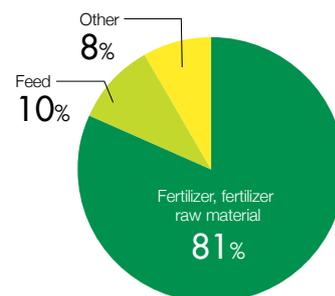
The amount of waste and by-product decreased in fiscal 2016 despite increased production. While the resource recovery ratio declined from the previous year due to the generation of hard-to-recover by-products at contracted sites, a recycling ratio above 99% was maintained by promoting the utilization of by-products and effective use of boiler residue.

To continue controlling waste generation, the Group will promote efforts in each division to appropriately manage production and sales activities. It will also work to maintain a recovery ratio above 99% by recovering resources properly in accordance with local laws.

Volume of waste and by-products and resource recovery ratio



Applications of recovered by-products (FY2016)



Fiscal 2016 Input and Output Balance

The Ajinomoto Group supports SDGs and seeks to contribute to a sustainable environment based on its Ajinomoto Group Environmental Targets. The Group is improving resource usage for maximum efficiency by considering environmental impact throughout product life cycles.

Environmental Impact Assessment (Scope 1, 2, 3)

The Ajinomoto Group conducts lifecycle assessments (LCA) to understand the environmental impact of its business. The Group's LCA is based on carbon footprint (CFP) calculations that help ascertain the Group's gross CO₂ emissions across all product processes from raw materials and production through distribution, package disposal, and home use (only products with fixed preparation methods such as cup soups). The Group's LCA covers the environmental impact of energy use in headquarters, sales divisions, research centers, and other back-office sections, as well as business travel. The Group compiles product's CFP results and back-office data to grasp the Scope 1, 2, and 3 environmental impact of its business.

According to Scope 1, 2, and 3 analysis results, over 50% of Group CO₂ emissions relate to raw materials. Agriculture, livestock, and fishery products constitute a large proportion of its raw materials, including plants used for amino acid fermentation and fish and meat used in extracts for seasonings. They require large amounts of water, fuel for tractors and fishing boats, and animal feed. While producing these raw materials impacts the environment, they are also at risk from climate change. The Ajinomoto Group uses LCA to reduce the volume of raw materials used not only in production, but also in R&D stage. Moving downstream to disposal, the Group started conducting green packaging assessments in 1991 to help reduce the environmental impact of packaging within the product lifecycle.

Scope 1

Direct greenhouse gas emissions from sources that are owned or controlled by the organization (burning fuel, industrial processes, vehicle use, etc.).

Scope 2

Indirect emissions from the generation of purchased electricity, heat, or steam consumed by the company.

Scope 3

Other indirect emissions (product use, disposal and transport, employee commuting and business travel, investment, etc.).

Data calculation

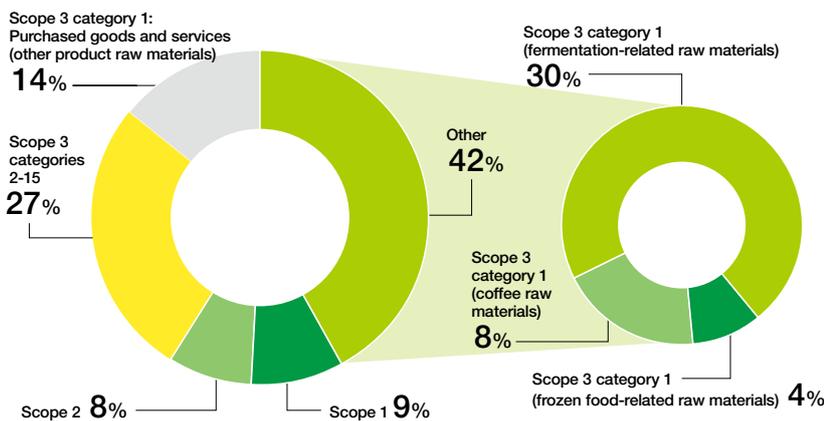
• Scope of reporting :

Target 109 major business sites that have a significant overall environmental impact within the Ajinomoto Group as defined in the consolidated financial accounting system.

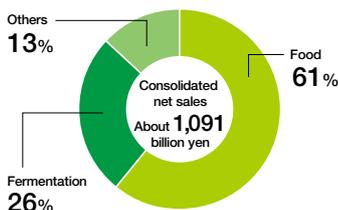
• Reporting period :

April 1, 2016, to March 31, 2017

Ajinomoto Group CO₂ Emissions (Scope 1, 2, 3)



Consolidated net sales (reference)



*The Ajinomoto Group's business segments are categorized according to the characteristics of the environmental impact incurred by the various manufacturing methods, excluding cooperative ventures, such as edible oils. These categories are different from the business segments based on consolidated financial accounting. Their scope of reporting is different from the scope applied to the input and output balance.



Raw materials

CO₂ emissions from resource extraction through manufacture of all products purchased by the Ajinomoto Group.



Production

CO₂ emissions from use of fuels and electricity in Ajinomoto Group production processes.



Transport

CO₂ emissions relating to the distribution of all products purchased and manufactured.



Use

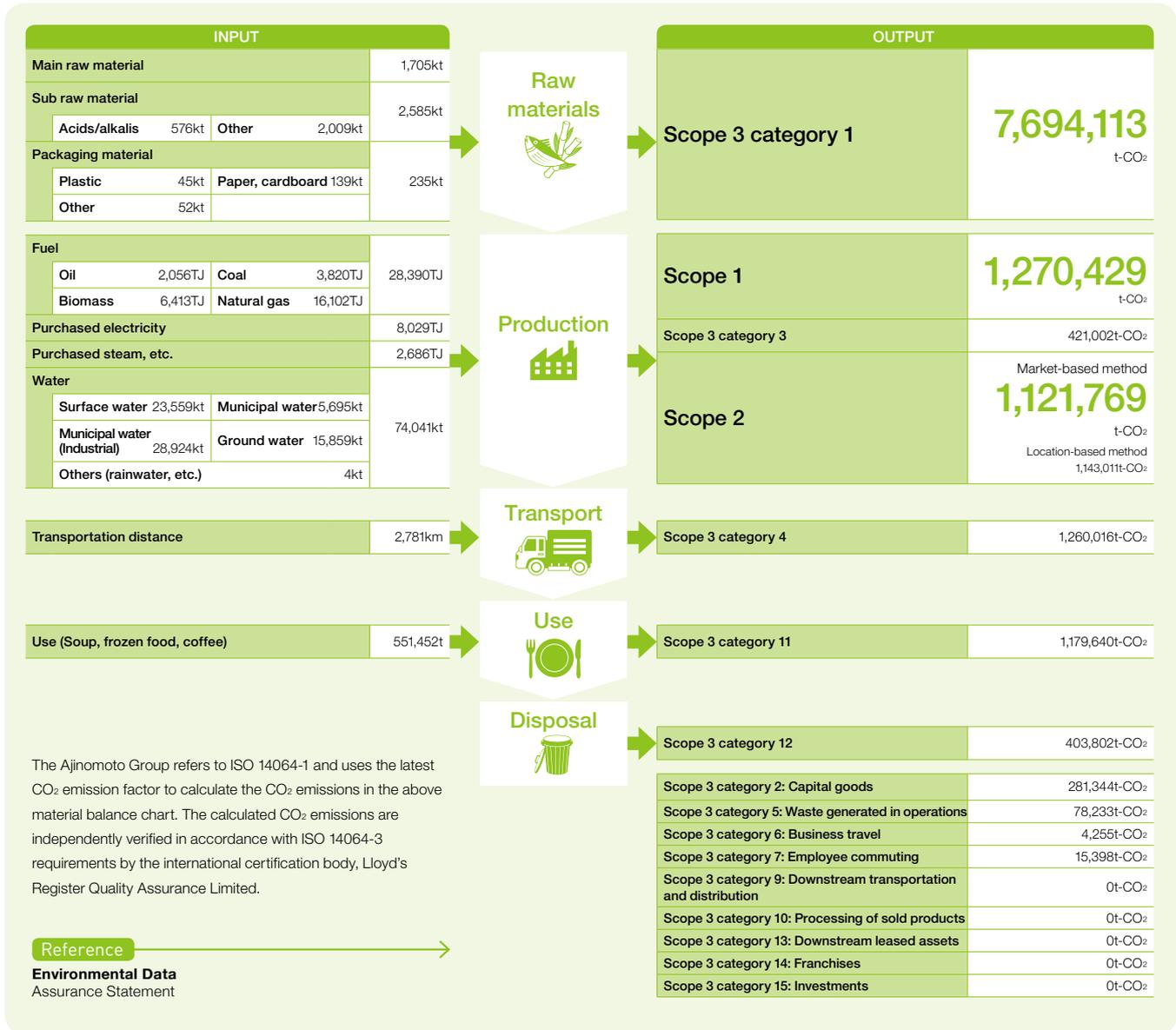
CO₂ emissions required to prepare cup soup, instant coffee, and frozen foods.



Disposal

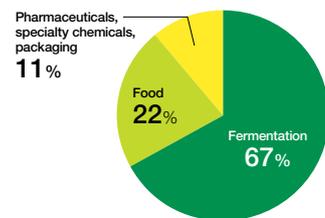
CO₂ emissions from the disposal of Ajinomoto Group product packaging.

FY2016 material balance across the business lifecycle



Water withdrawal

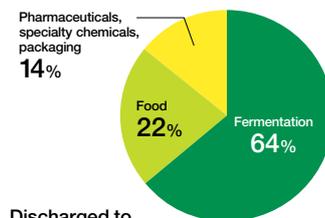
74,041kt



Surface water	23,559kt
Municipal water (Industrial)	28,924kt
Ground water	15,859kt
Municipal water	5,695kt
Others (rainwater, etc.)	4,000t

Discharged water

59,700kt

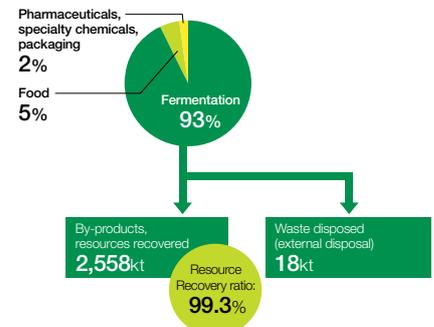


Discharged to

Public waterways (indirect cooling water, etc.)	22,373kt
Public waterways (discharged after treatment, etc.)	25,872kt
Public sewerage	9,909kt
Water for irrigation use	1,547kt
BOD	170t
Nitrogen	385t

Waste, by-products emissions

2,575kt



NO _x	3,627t
SO _x	2,201t
Soot and dust	2,255t
CFCs, HCFCs, HFCs	5t

Development of Technologies and Products That Contribute to Global Sustainability

The Ajinomoto Group is pursuing research and technology development to enhance the environmental value of its products and business activities. In addition to considering environmental impact throughout product life cycles, the Group is using its knowledge to create new businesses that contribute to global sustainability.

Assessment of environmental impacts across product life cycles

■ Performance of carbon footprints (CFP)

By May 2012, the Group's CFP quantification standards and values for nine amino acid-based products, including feed-use lysine, have been certified under the Carbon Footprint Program of the Japan Environmental Management Association for Industry. The Group created its own CFP quantification system for household products based on the ISO/TS 14067 standard for carbon footprint, issued by the International Standards Organization. Initially the system covered seasoning products such as *Nabe Cube*® in fiscal 2013, but was extended to cover individual stick coffee mixes, frozen items, and most of the Group's major household products. In fiscal 2016, to assess global environmental impacts, calculations were done for representative flavorings in several countries, including *Masako*® in Indonesia, and were used by the Group to obtain third-party assurance for Scope 3.

■ Performance of water footprint

Since fiscal 2014, the Ajinomoto Group has researched methods for quantifying water footprints based on the ISO 14046 standards. The evaluation model used a conventional mixed animal feed from Europe, in which people have strong interest in the present state of the water environment. The model feed was then compared with low-crudeprotein feed including amino acids.

The Group used regional characterization factors^[1] in its water footprint quantifications. The system weights specific regional water resources by country according to the richness of resources in locations where raw materials are manufactured.

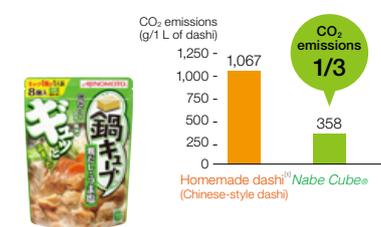
In fiscal 2016, a survey in France was conducted to improve the accuracy of calculations about water use stage. The water footprint quantifications clarify that amino-acid animal feed uses 14% less water than a conventional mixed feed made with soy or oat meal in France, which has constraints on water resources. The results also showed that it can reduce water footprint by 100 kiloliters, and nitrogen load by 1 kg N per tonne of feed.

[1] Average global precipitation is set at 1. Water-rich areas are assigned a factor less than 1 (i.e., when one liter of water is used, it is evaluated as using less than one liter due to abundant water supply). Water-poor areas are assigned a factor greater than 1 based on the opposite assumption.

Example of visualization: *Nabe Cube*®

The amount of CO₂ emitted for the entire product life cycle of *Nabe Cube*® is about one-third of typical homemade Chinese-style dashi.

■ CO₂ emissions from making one liter of dashi



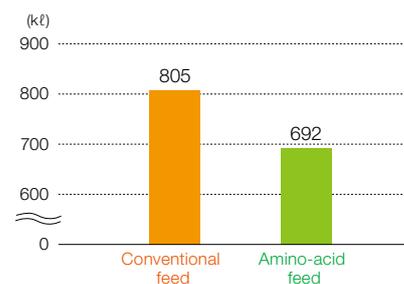
[2] Based on standard proportion of ingredients for method of preparation shown in Standard Tables of Food Composition in Japan, Fifth Revised and Enlarged Edition, 2005 (Ministry of Education, Culture, Sports, Science and Technology)

Reference

Environmental Data

CFP values for Ajinomoto Group products

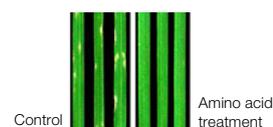
■ Water footprints for river water and groundwater



Utilization of amino acids for eco-friendly agriculture

As the world's leading amino acids manufacturer, the Ajinomoto Group has conducted extensive research and development into the production and utilization of amino acids, not only for human health but also agriculture.

In addition to being a nutritional source for plants, amino acids also appear to have an effect of preventing crop disease. Cucumber anthracnose and rice blast disease dramatically reduce productivity and quality. While farmers are largely relying on chemical fungicides to prevent these diseases, the Group was able to reduce the diseases through the application of amino acids (see figure right). These results suggest that amino acids provide more ecologically friendly alternatives to chemical fungicides. The Group is now trying to elucidate the mechanism of the action for practical use on farms globally.



Rice roots were treated for one day with an amino acid (glutamic acid) solution before being infected with rice blast fungus. The control group was treated with water before infection. Seven days after infection, white lesion, a symptom caused by rice blast infection, is not observed in the amino acid treated group, suggesting that the infection was suppressed. (Joint research with the National Agriculture and Food Research Organization of Japan)

A richer harvest with value-added fertilizer

The Ajinomoto Group turns nutrient-rich co-products into fertilizers and feeds. These co-products are originally generated in the fermentation process during the manufacturing of amino acids and nucleic acids and then formulated with added value. The Group develops them specifically for local agricultural conditions and crops.

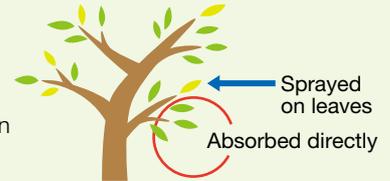


Foliar fertilizer to harness the power of amino acids

For more than 30 years the Ajinomoto Group has been advancing efforts to effectively use the nutritionally rich co-products of amino acid fermentation as organic-type fertilizer. Also progressing during this time has been the development of high value-added fertilizer made by fortifying these co-products with balanced amino acids, such as phosphoric acid and potassium. Continued testing and research is revealing amino acid and nucleic acid-enriched fertilizers to have an enhancing effect on root and plant growth and yields. First released in Brazil in 1989, *AJIFOL*® foliar fertilizer is now produced in seven countries worldwide. Comments have come in from numerous customers who are excited about the benefits of supplying nutrition in small amounts through the leaves. These include higher yields, stronger disease resistance, and sweeter fruit (higher Brix value).

Foliar application

Micro-nutrients are efficiently absorbed in small amounts.



Minimizes fertilizer loss

AJIFOL® manufactured in seven countries



Brazil Peru Indonesia Thailand Vietnam United States Japan

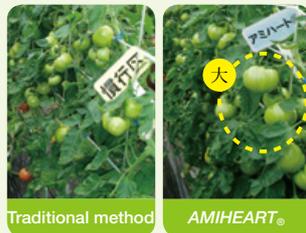
Products in Japan

AMIHEART®

Liquid fertilizer containing amino acids and ample quantities of monomolecular nucleic acids; readily absorbed and fast acting



Results for tomato cultivation



Also, *Turf Vital*® Pro, a product customized for lawn use, was launched in 2015.

AJIFOL® AminoGuard®

Foliar fertilizer containing an optimum formulation of concentrated amino acids and minerals; typically used in strawberry and tomato cultivation



Before use



After two months of use

High-bench strawberry cultivation. *AJIFOL*® was used here on strawberries that displayed inhibited growth from root damage, with poor leaf color, blossoming and growth. Plant vigor returned with foliar supplementation of amino acids.

Hayane Hayaoki

Liquid fertilizer containing nucleic acids and amino acids, with an optimal formulation of nitrogen, phosphate, and potassium for plant nurseries



Results for paddy-field rice cultivation



GLUHEART Plus

Foliar fertilizer containing glutamic acid, which improves plant growth in low sunlight or cold temperatures. Sales of *GLUHEART Plus* launched in July 2016 with ingredients that boost efficacy compared to the original *GLUHEART*.



GLUHEART

GLUHEART Plus

Potato growing trials show 11% increase in yield using new *GLUHEART Plus* compared to original *GLUHEART*.

Cooperation with partners to promote feed-use amino acids

It is well recognized that the adequate use of feed-use amino acids can substantially reduce nitrogen excretion from animals and save natural protein resources, thereby contributing to soil and water quality preservation, reductions in greenhouse gas emissions, and efficient use of limited arable land. Ajinomoto Animal Nutrition Group, Inc., as a leading amino acids manufacturer, is taking initiative in promoting these benefits through the development of environmentally-friendly new products and collaboration with international and local organizations.

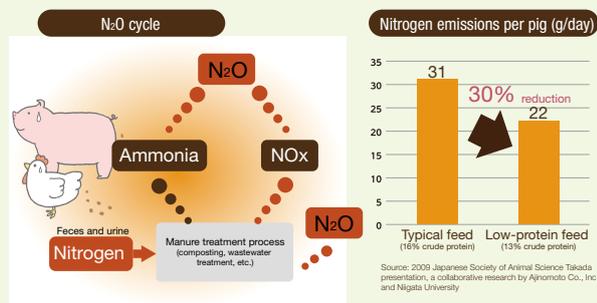


Reduction of environmental impact

The proteins that make up an animal's body consist of approximately 20 different amino acids, several of which are not synthesized in sufficient quantities in the body. These amino acids must be supplemented through feed. Feeds that have a poor amino acid balance prevent the body from effectively using amino acids, so they are excreted as nitrogen compounds, which impact soil and water quality. Additionally, a part of the nitrogen that is oxidized and reduced in the soil or air is released into the atmosphere as nitrous oxide (N₂O), which has approximately 300 times the warming potential of CO₂.

The addition of well-balanced feed-use amino acids helps livestock to better use the nutritional content of feeds, which helps to reduce the impact on the environment. Poultry raised with intensive use of feed-use amino acids and under conditions of reduced environmental impact is used as a raw material for the frozen foods produced by Ajinomoto Frozen Foods Co., Inc. This is one of Ajinomoto's endeavors to contribute to global environmental conservation across the supply chain.

N₂O cycle



Promotion of the benefits worldwide

In August 2012, the Specialty Feed Ingredients Sustainability (SFIS) consortium was established, representing feed industry associations in Europe, the Americas, and Japan, as well as leading manufacturers of specialty feed ingredients from around the world. Through its involvement in the SFIS consortium, Ajinomoto Animal Nutrition Group is demonstrating how amino acids in feed can help reduce environmental impact.

In June 2016, with the support of the SFIS consortium, Kebreab et al. published a report on the environmental load reducing effect of a low-protein diet fortified with feed-use amino acids and phytase [1] in livestock production (greenhouse gas emissions, eutrophication and acidification of rivers, etc.). Among their results was the report that feed-use amino acids are contributing to a 55% reduction of greenhouse gas emissions in Europe.

[1] Phytase is an enzyme that catalyzes the hydrolysis of phytic acid and releases phosphoric acid.

Visualization of the environmental benefits (Japan)

To popularize environmentally friendly livestock farming, it is important to raise awareness of livestock farmers about how greenhouse gas emissions can be reduced with feed-use amino acids. The farmers who utilize feed-use amino acids will also have to benefit in some way from achieving reductions in emissions. The Ajinomoto Group is engaged in various initiatives to help livestock producers understand these benefits.

Visualization of the carbon footprint

The Ajinomoto Group is using the carbon footprint model to quantify CO₂ emissions in the life cycle of feed-use amino acids.

Identifying CO₂ emissions in the life cycle of feed-use amino acids

March 2011 Ajinomoto Group's approach certified as a project under the domestic credit system of the Ministry of Economy, Trade and Industry (Japan)

September 2011 CFP values certified for feed-use lysine under the CFP Pilot Project of the Ministry of Economy, Trade and Industry (Japan)



Contribution to an emissions offset credit scheme

The J-Credit Scheme was created to give credit for the reduction of greenhouse gas emissions in order to achieve both environmental protection and economic growth by means such as switching to energy-efficient devices and proper forest management. Ajinomoto Co., Inc. was a contributor to the advancement of an emissions offset credit scheme in Japan, with a methodology to reduce N₂O emissions from pig and broiler manure treatment by utilizing low-protein feed under the scheme. This provides an incentive for livestock producers to reduce their environmental impact and could develop into a global framework with major implications and benefits.

13th Eco-Products Minister's Prize, the Ministry of Agriculture, Forestry and Fisheries Awards

In December 2016, Ajinomoto Co. Inc. and Ajinomoto Animal Nutrition Group, Inc. were selected for the Ministry of Agriculture, Forestry and Fisheries Award of the 13th Eco-Products Minister's Prize for feed-use lysine.



The appropriate addition of feed-use lysine by livestock producers leads to better efficiency in animals' utilization of amino acids, and contributes to a reduction in nitrogen emissions. The judges noted that feed-use lysine can help achieve both an optimization of feed nutrients, and a reduction of environmental impact around the world.

Reference

Special Feature 2 P35-36

A Solution to Animal Nutrition and Environmental Issues : Feed-use Amino Acid

Conservation of Ecosystems and Biodiversity

The Ajinomoto Group is cooperating with external stakeholders in community-based efforts to conserve biodiversity, across the global supply chain and value chain.

Biodiversity approach and policies

The Ajinomoto Group adopted a biodiversity policy and action agenda in January 2012 as part of its efforts to promote an effective business model for the sustainable use of biological resources. One of the priority items in the 2014–2016 Ajinomoto Group Medium-Term Environmental Plan was to develop action plans based on step-by-step assessment of the characteristics of key raw materials and local ecosystems.

The Ajinomoto Group Environmental Policies and Long-term Environmental Vision, both formulated in fiscal 2017, articulate the Group's thinking on ecosystems and biodiversity while supporting target-based action across the Group.

Reference

Ajinomoto Group Principles & Policies
Ajinomoto Group Environmental Policies
Ajinomoto Group Biodiversity Policy

Reference

Special Feature 2 P28-30

Ajinomoto Group Long-Term Environmental Vision

Initiatives for fisheries resources

For the sustainable procurement of raw materials, the Ajinomoto Group is focusing on initiatives relating to the skipjack tuna, an important fisheries resource in terms of both ecosystems and the Group's business activities. Since fiscal 2009, the Joint Tagging Survey of Skipjack off the Pacific Coast of Japan has been going on as a research project conducted with the National Research Institute of Far Seas Fisheries (NRIFSF) in Japan. Findings from the survey have been used in discussions by international fisheries management organizations.

Reference

Special Feature 2 P40-41

Skipjack ecological studies to increase sustainability of fisheries stock

Reference

The Environment P107-108

Initiatives for sustainable skipjack fisheries and resource use

Initiatives for forest ecosystem resources, sustainable land use, local ecosystems

Ajinomoto Co., Inc. became a member of the Roundtable on Sustainable Palm Oil (RSPO) in August 2012 and has a target to fully switch to sustainable palm oil by 2020 for palm oil raw materials used across the Ajinomoto Group.

With regard to paper, the Ajinomoto Group has set a target in its Long-term Environmental Vision to realize 100% sustainable procurement by fiscal 2020. Since fiscal 2015 the Group has been scaling up adoption of FSC®-certified paper in product containers and packaging. In fall 2017, for example, FSC®-certified paper was adopted and the certification mark indicated on packages of *HON-DASHI*®, *Cook Do*®, *Kyo-no Ohzara*® and other key consumer products. Since November 2013, Ajinomoto Co., Inc. has also participated in the Consortium for Sustainable Paper Use (CSPU).

Reference

Ajinomoto Group Principles & Policies
Ajinomoto Group Guidelines for Procurement of Environmentally Responsible Paper

■ Sustainable land use and local ecosystems

Ajinomoto Co., Inc. is also a member of the Japan Business Initiative for Biodiversity (JBIB). Working with other member companies, the company is making use of land at its business locations to ensure that business growth is balanced with local communities and ecosystems. Having established the Ajinomoto Bird Sanctuary in Yokkaichi, the company's Tokai Factory works tirelessly to maintain a successful coexistence between the factory and local ecosystems.

Forest of *Blendy*® Suzuka and Gunma: Conservation of forests and the water (Ajinomoto AGF, Inc., AGF Suzuka, Inc., AGF Kanto, Inc.)



Water is an indispensable ingredient in the bottled and instant coffee products made by Ajinomoto AGF, Inc.

The company's production centers, AGF Suzuka, Inc. and AGF Kanto, Inc., withdraw water from the Suzuka River and Arato River (a tributary of the Tone River), whose sources trace back to forests located in the foothills of the Suzuka Mountains and Mount Akagi, respectively. Forest of *Blendy*® is an AGF initiative aimed at conserving these forests for future generations by actively managing a portion of them and learning firsthand the value they provide in sustaining wildlife and providing clean water.

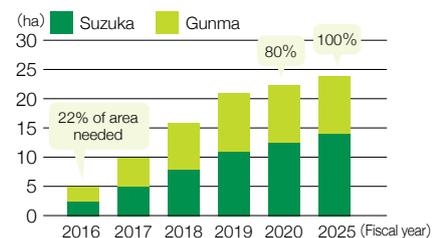
Forest area to expand five-fold by 2025

Ajinomoto AGF, Inc. estimates that, as of March 31, 2017, groundwater (recharge^[1] volume) from the two Forest of *Blendy*® sites currently accounts for approximately 20% of the water used in *Blendy*® bottled coffee produced at Ajinomoto AGF's two factories (AGF Suzuka and AGF Kanto).

To cover 100% of the water used in *Blendy*® bottled coffee with groundwater (recharge volume) supplied by Forest of *Blendy*®, Ajinomoto AGF, Inc. aims to expand the forest's activity area five times its current size.

[1] The downward movement of rainwater and surface water to groundwater. Recharge volume (groundwater) increases the larger the forest area.

Planned expansion of Forest of *Blendy*®



Customer events

● Sign installed at Forest of *Blendy*® Suzuka

In May 2017, Ajinomoto AGF, Inc. installed and unveiled a new sign in the entrance area to Forest of *Blendy*® Suzuka that conveys the essence of the project to forest visitors.



(From left) Ajinomoto AGF President Hideaki Shinada, Mayor of Kameyama City Yoshiyuki Sakurai, and Chair of Sakashita Town Building Council (Kameyama City) Hideki Yamauchi

● Customers invited to the forest

Thanks to tireless efforts begun in 2014, Forest of *Blendy*® Suzuka has grown into a forest that can now host guests. In October 2016, elementary school students from Kameyama and Suzuka were invited for a hands-on insect collection workshop where they gathered butterflies, dragonflies, and other insects and made their own displays.

For the second event, in March 2017, nearby residents were invited to a Forest of *Blendy*® nature workshop and AGF Suzuka factory tour, held jointly with local supermarkets.

These events mark a new chapter that extends the forest's mission beyond pure conservation to also include hands-on environmental education.



Insect collecting workshop taught by a lecturer from the Mie Prefectural Museum

AGF Suzuka factory tour

Suzuka

Suzuka

1,850 employees in total help out at Suzuka and Gunma sites

● Forest of *Blendy*® Suzuka: Participants top 1,000!

Forest of *Blendy*® Suzuka in Kameyama, Mie Prefecture, has entered its fourth year of forest management since efforts began in 2014. In total, about 1,250 people, including Ajinomoto Group employees, have participated in 19 events as of June 2017. Activities have included not only tree thinning and other conservation work but also building loop trails and installing guidance signs and benches in flower and tree-planting areas.



More than 1,000 participants! Group photo at the 15th Forest of *Blendy*® Suzuka event

Suzuka

Forest of *Blendy*® Gunma

Gunma

● Cedar saplings growing healthily, deciduous area added

Forest of *Blendy*® Gunma in Maebashi, Gunma Prefecture, has entered its third year of forest management since efforts began in 2015. In total, about 600 people have participated in nine events to date. In fiscal 2016, they cleared undergrowth around the cedar saplings and nets installed to protect them from predators, and also begun developing a new deciduous area and walking trails.



Trail building at Forest of *Blendy*® (left: Gunma, right: Suzuka)

Ajinomoto Bird Sanctuary in Yokkaichi (Tokai Factory, Ajinomoto Co., Inc.)

Respecting local ecosystems, providing a home for rare wildlife

Corporate land that is used for offices and manufacturing is part of the local natural environment. Green spaces on corporate land can play an important role in local ecosystems.

The Tokai Factory of Ajinomoto Co., Inc. is situated in a large industrial complex in Yokkaichi City, Mie Prefecture. The site includes a 5,000-square-meter freshwater pond surrounded by trees. In 2002, the company expanded the area into a 1.27-hectare biodiversity conservation area called the Ajinomoto Bird Sanctuary in Yokkaichi.

The sanctuary is currently home to six species of heron including the intermediate egret, which is designated as an endangered species by Japan and Mie Prefecture. Other rare species include the northern goshawk and common kingfisher, the latter being a species only found in clean water habitats. The sanctuary also serves as a stopping point for migrating birds.

Ajinomoto Bird Sanctuary ecosystem potential and challenges

With the Yokkaichi City port two kilometers east, the steep hills of the Nanbu Kyuryo Park three kilometers west, and rivers to the north and south, the Ajinomoto Bird Sanctuary is linked to various environments, and is the ideal spot for building a network of ecosystems in the Yokkaichi region.

In fiscal 2012 and 2013, wildlife experts conducted a fact-finding assessment of business locations and surrounding areas. The assessment confirmed that the sanctuary was home to 22 families and 38 species of bird, 61 families and 120 species of insect, two families and species of fish, 15 families and 19 species of benthic organisms, and a colony of rare intermediate egret. However, the assessment also identified issues of overcrowding in the heron and common cormorant breeding seasons, excessive bird droppings, invasive water lilies and red swamp crayfish in the pond. The assessment showed the need for ongoing work to maintain and improve the Ajinomoto Bird Sanctuary in Yokkaichi as a healthy ecosystem and an important biodiversity conservation area for the Hokusei region.

Introduction of Ajinomoto Bird Sanctuary through factory tour

In fiscal 2016, Ajinomoto Co., Inc. added a new factory tour route introducing the company's environmental initiatives, specifically the Ajinomoto Bird Sanctuary and other efforts at the Tokai Factory. The program has been a success among environmentally minded local residents and elementary school students, who come to study the factory's wastewater treatment systems and also closely observe birds still inhabiting the industrial park.

In February and March 2017, selective thinning of trees was conducted as part of conservation work in the wooded area around the pond.

Local experts, and research and academic institutions will be consulted regarding the removal of invasive species in the pond going forward. Ajinomoto Co., Inc. will continue to be committed long-term to conserving local environmental assets and operating in greater harmony with ecosystems in northern Mie.



Common kingfisher (top left), rare dragonfly (top right), ducks (bottom left), and herons (bottom right)



Before improvements: Invasive water lilies in pond (left). Dense tree growth



Pond surface is clear after removal of invasive water lilies

Initiatives for sustainable skipjack fisheries and resource use

Ajinomoto Co., Inc. began its initiatives for the sustainable use of skipjack resources in 2006, and has been continuing since 2009 a Joint Tagging Survey of Skipjack off the Pacific Coast of Japan, a research project conducted with the National Research Institute of Far Seas Fisheries (NRIFSF).

Since beginning survey activities a decade ago, Ajinomoto Co., Inc. has led this initiative as a hub connecting international stakeholders through past partnerships.



Establishment of international rules for sustainable fisheries

Ajinomoto Co., Inc. started its initiatives for sustainable skipjack fisheries and resource use in response to the recent rapid increase of skipjack catches in the western and central Pacific region (particularly in tropical seas).

For sustainable use in the future, the company decided to support international efforts to create rules for sound resource management of fisheries. To increase scientific knowledge on the migratory patterns of skipjack in coastal waters around Japan, Ajinomoto Co., Inc. has conducted the joint tagging survey since 2009, and through the government, contributed the findings to discussions among international fisheries management organizations.

Meanwhile, skipjack catches have fallen significantly in the past ten years in waters around Japan, resulting in difficult times for the domestic skipjack fisheries. Against this backdrop, the company has also been actively sharing the knowledge of skipjack ecology gained from studies with domestic stakeholders, aiming to contribute to sustainable regional development and the domestic skipjack fishery industry which supports Japan's food culture.

Resource assessments and fishery industry concerns

International discussions by the Western and Central Pacific Fisheries Commission (WCPFC) about resource management have been ongoing, and gaps have arisen between Japan and other countries in the understanding of skipjack resources in the western and central Pacific region.

The international fishing industry operating in tropical waters play a major role in skipjack fishing in the western and central Pacific, where annual catches of 1.8 to 2.0 million tonnes are maintained. However, resource assessments claim that the skipjack stocks are essentially in the "not overfished nor overfishing" zone, and countries operating deep-sea fisheries and island states are making no attempts to reduce skipjack catches in tropical waters.

Objectives of activities

Stable supply of raw materials

Contribution to creating international rules for skipjack resource management (western and central Pacific, particularly tropical seas)

↓
Sustainable supply of raw material for HON-DASHI®

Interconnected

Sustainable regional development

Contribution to sustainable domestic skipjack fishery (coastal areas around Japan)

↓
Food culture based on skipjack, and regional sustainability to support that

Purpose and interpretation of skipjack ecological studies by Ajinomoto Co., Inc.

- ① To improve the WCPFC's assessment process, it is necessary to use not only statistical methods focusing on fishery industry data, but also to gather biological and ecological information about skipjack.
- ② It is important to clarify the relationship between skipjack resources in tropical and sub-tropical to temperate waters around Japan. The waters along the Kuroshio current, where the company conducts research activities, are important for connecting tropical and subtropical areas.
- ③ The key region for skipjack migration toward Japan includes coastal and offshore regions that connect Indonesia, the Philippines, Taiwan and Japan, so it is important that these countries and regions understand the issues discussed at WCPFC. They also happen to be key countries where Ajinomoto does business.
- ④ In addition to fishing activities in tropical waters, issues in coastal and offshore waters around Japan (including climate change, shortage of fisheries workers, lack of profitability) are predicted to see more instability and uncertainty, so it is important to improve the fisheries here and make them more efficient, economical, and sustainable. Particularly the waters around Japan's southwest islands are vulnerable to impacts of those factors, detailed information about skipjack ecology in this area can contribute directly to efforts to improve the situation.

Joint Skipjack Tagging Survey Findings

1. Survey using electronic archival tags

Archival tags are helpful for getting an overall picture of the behavioral ecological patterns of skipjack tuna because they can use illumination data at noon every day to estimate longitude and latitude, while also recording body temperature, water temperature, and depth every 30 seconds. Survey activities in Japan's southwest islands in 2012 to 2016 produced a wealth of new information on skipjack ecology, such as migration, vertical movements, and feeding behavior, enabling researchers to trace their route northward to Japanese waters—a major finding.

Through partnership with the Taiwanese government, research institutes, and fishery association, the survey of skipjack migratory behaviors in the Kuroshio Current source waters is now being expanded upstream to include waters off Taiwan.

Major research partners

National Research Institute of Far Seas Fisheries

2. Survey using pingers (ultrasonic tags)

A biotelemetry system that consists of pingers and receivers holds promise not only as a tool for observing skipjack, but also as shared infrastructure that could support sustainable fisheries management across different fish species.

As this technology is still in development, Ajinomoto Co., Inc. is conducting joint research aimed at practical application with a team of four national universities taking part in a government-funded Strategic Basic Research Program.

In 2015 the company began a tagging survey using pingers and installing receivers in Kuroshio waters near Yonaguni Island. Now, with support from the Yonaguni Town Fishery Cooperative, they are operating a constant monitoring system over a roughly 500-square-kilometer area southwest of the island. The network consists of receivers on all fish aggregating devices (FADs) operated by local fishing vessels (up to five) and onboard receivers on five fishing vessels.

Major research partners

- Tokyo University of Marine Science and Technology
- Research team formed by the participation of Hokkaido University, Kyoto University, University of Tokyo, and Tokyo University of Marine Science and Technology in the Japan Science and Technology Agency (JST) Strategic Basic Research Programs, CREST^[1]

[1] Team-based research aimed at sowing the "seeds" of scientific and technical innovation. The research is part of a program that funds basic research for achieving strategic goals set by the Japanese government.



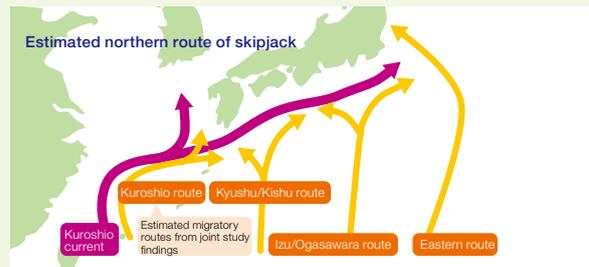
Pinger ultrasonic tag and receiver

A biotelemetry system use receivers to catch and record information transmitted ultrasonically by tagged fish (pingers). The receivers can detect signals from tagged fish in a 500-meter radius and provide nearly real-time observation.

Since data recorded by archival tags are stored in internal memory, the information cannot be obtained without recovering tagged fish and the tags themselves. The low recovery rate—less than 10%—necessitates a large-scale, multi-year survey.



Archival tag

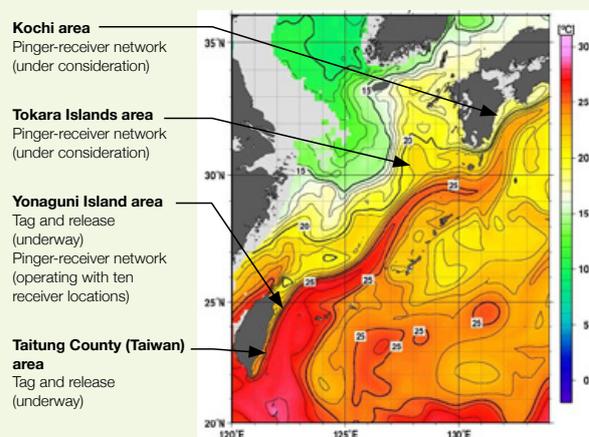


From the data obtained, researchers can watch skipjack accumulating in areas and then separating and moving away, and also specific movements between FADs in the region. The system also allows local fishermen and Tokyo researchers to share real-time data for observing fish behavior.

Expanding this pinger-receiver network across a broader area should provide important clues to the wide-ranging behaviors of highly migratory species, skipjack among others. To that end, the company is now talking with various local stakeholders to expand the receiver network to waters near the Tokara Islands and Kochi prefecture in Japan.

Concept for regional pinger network in Kuroshio Current source waters

Background map indicates water temperature at 50-meter depth in early May 2016 (courtesy: Japan Meteorological Agency)



Reference

Special Feature 2 P40-41

Skipjack ecological studies to increase sustainability of fisheries stock

Development of Environmentally Friendly Packaging

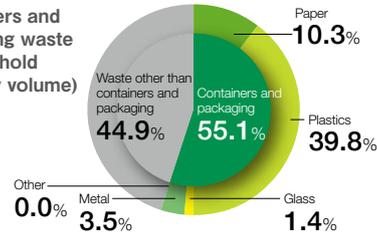
The Ajinomoto Group has worked to design and develop containers and packaging that minimize environmental impact while fully maintaining the quality of the food inside. Consumers today want to select products that are as environmentally friendly as possible, and the Group is determined to support this trend.

DATA

Household trash, and containers and packaging

Japan disposed of 43.98 million tonnes of general waste in fiscal 2015. Household trash accounted for approximately 65% or 28.54 million tonnes, of which 55.1% by volume consisted of containers and packaging.

Containers and packaging waste in household trash (by volume)



Source: Survey on Containers and Packaging Waste by the Ministry of the Environment (fiscal 2015)
*The sum of values may not match the total shown due to rounding.

Efforts to meet customer needs

Containers and packaging serve an important role in maintaining the quality of the food they hold until opened, yet they account for 55.1% of Japan's household trash by volume (fiscal 2015 results). In a survey on daily dietary habits and environmental awareness conducted by Ajinomoto Co., Inc., more than 80% of consumers said that they "try to reduce trash," "separate trash properly," and "buy refillable products as much as possible."

To address social issues around food, resource depletion, and energy, the Ajinomoto Group strives not only to reduce consumption of packaging materials and CO₂ emissions, but also to create innovative container and packaging technology. The Group's innovations span many fields: reducing food loss with technologies that maintain product freshness and extend best-before dates and technologies that prevent food residue in packaging, introducing biomass plastics to replace petroleum-derived raw materials, developing ways to use inedible raw materials, and designing packaging for greater efficiency in logistics and delivery.

Survey on daily dietary habits and environmental awareness

- I try to reduce trash in my daily life **78%**
- I take care to separate trash properly **95%**
- I try to buy refillable seasoning products **83%**
- I think that there is a lot of waste in food packaging and trays for perishables **83%**

Source: Ajinomoto Co., Inc. Ajinomoto Monitoring Consumer Survey 2015
Sample: 2,064 homemakers from households across Japan composed of two or more people aged 20-70

Organizations to improve containers and packaging

The products of the Ajinomoto Group require many different kinds of containers and packaging. To encourage each group company to make its containers and packaging more environmentally friendly, the Group holds events like the Ajinomoto Group Food Conference and the Packaging Designers' Liaison Meeting. The Group will continue to leverage its comprehensive strengths to make further improvements toward environmentally friendly, easy-to-understand packaging design.



Packaging Designers' Liaison Meeting

Cooperation with outside organizations

The Ajinomoto Group cooperates with recycling councils and public organizations to advance container and packaging recycling and improve recycling laws and systems. It also encourages consumer awareness of the 3Rs by presenting examples.

For example, the Group cooperated with the Ministry of Agriculture, Forestry and Fisheries (MAFF) to publish a collection of case studies of containers and packaging functionally enhanced to reduce food loss. The collection features *HON-DASHI*® 60-gram jar, *Nabe Cube*®, and *amino VITAL*® Gold as examples.

Examples

- Eco-Products Exhibition
- Collection of case studies of containers and packaging functionally enhanced to reduce food loss, Ministry of Agriculture, Forestry and Fisheries
- Containers and Packaging Diet Declaration in Nine Municipalities
- Presentation of 3R best practices to recycling councils

Implementation of environmentally friendly design of containers and packaging

The Ajinomoto Group is working to advance the eco-friendly design of containers and packaging. The eco-friendly design is standardized internationally by the ISO 18600 series released in 2013, and in Japan by the Ministry of Economy, Trade and Industry via JIS Z 0130, released in 2015.

The eco-friendly design both satisfies all inherent functions, and reduces environmental impacts. Inherent functions include product protection, optimized distribution, optimized product displays, customer receptivity, labeling, safety, and regulatory compliance. Environmental considerations in design include the 3Rs (reduce, reuse, recycle), food loss reduction, carbon emissions reduction, and sustainable materials use.

The Ajinomoto Group strives to balance environmentally friendly design for containers and packaging with the risk of using too little packaging material. In concrete terms, the Group works to prevent from increasing waste due to product quality degradation or damage while refraining from overpackaging, in order to minimize environmental impact. (Figure 1)

To advance eco-friendly design across the Ajinomoto Group, in April 2017 the Group revised the environmental assessment that it conducts before releasing new and revised products. The Group assesses them with a checklist of two categories: regulations and other product-specific compliance requirements, and confirmation of the design's compatibility with group environmental objectives, such as 3Rs promotion. (Table 1)

Compliance with the Containers and Packaging Recycling Law in Japan requires businesses to reduce the weight of containers and packaging waste for retail products and to recycle said waste materials. Additionally, MAFF in April 2017 released a relevant case study collection to encourage businesses to reduce food loss with respect to the Food Recycling Law.

Each group company in Japan is working independently to comply with such requirements. For example, Ajinomoto Co., Inc., in addition to its environmental assessment checklist, assesses new and revised products in greater detail prior to release using its points-based Eco-Index for Containers and Packaging, which was revised in April 2017. (Table 2)

In fiscal 2015, the three group companies in Japan^[1] used 37,900 tonnes of containers and packaging subject to recycling requirements, down to 98.4% of the previous year. Based on this usage, recycling fee payment for fiscal 2017 was 450 million yen, down to 95.8% of the previous year. (Figure 2)

[1] Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., Ajinomoto AGF, Inc.

Figure 1: Environmentally friendly design of containers and packaging

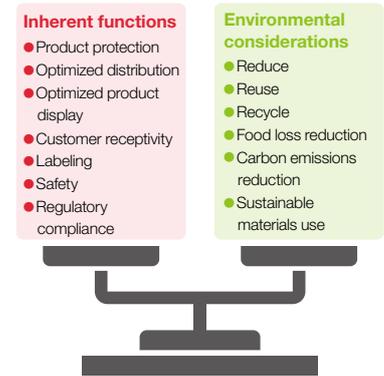


Figure 2: Three group companies in Japan^[1]: Amount of used household product containers and packaging and recycling fees

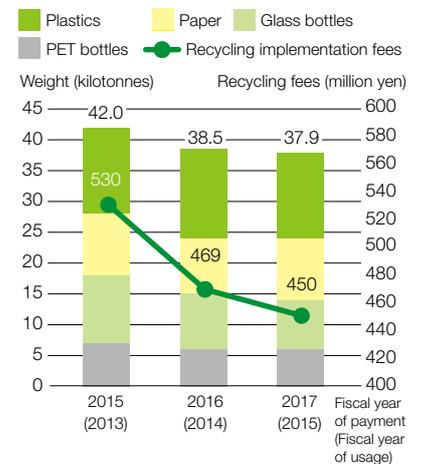


Table 1: Environmental assessment checklist

Objective		Check item
Compliance	Waste 3Rs	Compliance with environmental laws and regulations
	Food loss reduction	Prevention of product degradation and damage
	Risk	Prevention of usage of potentially hazardous materials
Compatibility with group environmental objectives	Waste 3Rs	Usage of material(s) compatible with 3Rs
	Sustainable procurement	Usage of sustainable material(s)
	Food loss reduction	Usage of material(s) that help reduce food loss
	Greenhouse gas emissions reduction	Improvement of loading efficiency in transport
	Consumer awareness of green living	Display of environmental labels

Table 2: Eco-Index for Containers and Packaging assessment table

Objective	Assessment item (example)	Assessment standard (example)	Points
Waste 3Rs	Plastic container/packaging weight reduction	At least 450 kg reduced per year	+2
	Space per packaging volume	<15%	+1
Greenhouse gas emissions reduction	LC-CO ₂ emissions reduction	Reduced over conventional product	+1
Sustainable procurement	Usage of eco-friendly materials	Usage of forest-certified paper	+1
Consumer awareness of green living	Environmental labeling	Display of the <i>Aji-na Eco</i> mark	+1
Waste 3Rs	Compatibility with recycling systems	Easily recyclable materials used throughout	+1
Food loss reduction	Food loss reduction	Extension of shelf life	+1
		Adoption of single-serve packaging	+1
Greenhouse gas emissions reduction	Transport efficiency	Loading efficiency ≥80%	+1

Examples of environmentally friendly design

The Ajinomoto Group advances eco-friendly design by selecting and developing containers and packaging best-suited to the specific characteristics and state of their contents. These include everything from glass bottles, plastic film, pouches, and trays, to paper boxes and transport containers (cardboard). Below are examples that contribute to a reduction in food loss and resource conservation.

Example 1: Freshness retention in *HON-DASHI*® 60-gram jar

An additional rib inside the cap improves airtightness by sealing the outer perimeter of the container's neck. This design is intended to suppress quality degradation and preserve freshness by preventing caking after opening and keeping fragrance lasting longer. (Since fiscal 2008)



Example 2: Single-serve packaging in *Nabe Cube*®

Cube seasoning for hot pot dishes (*nabe*) are packaged by individual serving size (one cube). This enables flexible adjustment of preparation volume, from a one-person dish to a large-party meal, potentially helping to reduce food loss resulting from home-cooked leftovers. (Since fiscal 2012)



Awarded 41st Kinoshita Prize for Research and Development, Japan Packaging Institute (in recognition of efforts to develop packaging materials that help reduce CO₂ emissions)



Example 3: Damage prevention in amino *VITAL*® Gold

Previously, the sharp corners of stick packs punctured other stick packs during transport. Improving the production line to round the stick corners helped to prevent tearing and other damage from punctures, thereby reducing loss from disposal. (Since fiscal 2016)



Example 4: FSC®-certified paper use for *HON-DASHI*® and *Cook Do*® *Kyo-no Ohzara*® gift sets

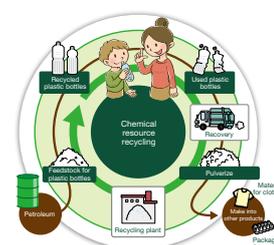
With the adoption of FSC®-certified packaging materials for gift set boxes in the 2016 year-end gift season, the Ajinomoto Group will continue to phase in FSC®-certified packaging for major home products such as Ajinomoto Co., Inc.'s *HON-DASHI*® and *Cook Do*® *Kyo-no Ohzara*® from the fall of 2017. The boxes are labeled with the FSC® certification mark and their own respective ecomarks, *Aji-na Eco* and *Hotto-suru Eco* to let consumers know that these products use paper produced from responsibly managed forests.



Example 5: 100% recycled, heat-resistant PET resin in *Blendy*® bottled coffee

Working with the Toyo Seikan Group, Ajinomoto AGF, Inc. developed and introduced for all major bottled coffee products a technology that chemically decomposes post-consumer plastic bottles and recycles the material into heat-resistant plastic bottles. This makes Ajinomoto AGF, Inc., the only beverage company worldwide to use plastic bottles made entirely from recycled heat-resistant PET resin. The introduction will reduce raw material use of fossil fuel resources by an estimated 2,000 tonnes per year. (Since spring 2016)

Difference of plastic bottle cycles between conventional and recycled one



Promotion of products with original labeling for environmental packaging

Modern product packages are already small and thin, so it is often difficult for customers to notice changes made in package weight, thickness, and size and materials used. However, when the huge sales volume of products is taken into account, the sum of these small efforts can result in significant environmental benefits.

Consumers want to purchase environmentally friendly products and to know whether a product is eco-friendly at a glance, so the Ajinomoto Group and Ajinomoto AGF, Inc. began labeling products with their original *Aji-na Eco* and *Hotto-suru Eco* marks in 2010 and 2015 respectively.



<p>味なエコ</p> <p>What is <i>Aji-na Eco</i> mark?</p> <p><i>Aji-na Eco</i> is a term describing the smart and ecological products or information provided by the Ajinomoto Group, and the logo mark expresses the image of our green planet, the pleasure of eating, and a global environment made even better through food.</p> <p>Number of <i>Aji-na Eco</i> mark products</p> <p>201</p> <p>As of July, 2017 (Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., Ajinomoto AGF, Inc.)</p>	<p>What is <i>Hotto-suru Eco</i>?</p> <p><i>Hotto-suru Eco</i> indicates Ajinomoto AGF, Inc. products with environmental features. The logo mark expresses the comfort felt when drinking one's favorite beverage, colored in an earth green. The <i>Hotto-suru Eco</i> label was introduced in spring 2015.</p> <p>Number of <i>Hotto-suru Eco</i> mark products</p> <p>148</p> <p>As of July, 2017 (Ajinomoto AGF, Inc.)</p>
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<p>Plant-based plastic</p> <p>The packaging material of these products contains plant-based plastic. Using raw materials derived from plants helps reduce fossil fuel use and CO₂ emissions.</p> <p>Products with a cap or tray made of more than 25% plant-derived plastic, replacing conventional fossil fuel-derived materials</p>	<p>味なエコ 味なエコ</p> <p>® 植物性キャップでエコ ® 植物性トレイでエコ</p> <p>Products with PET film on the packaging surface made of more than 20% plant-derived plastic</p> <p>植物性プラでエコ</p> <p>® 植物性カップでエコ</p>
<p>Recycled plastic</p> <p>The packaging material of these products contains recycled plastic. Using recycled plastic helps reduce fossil fuel use and CO₂ emissions.</p> <p>*Roasted and ground coffee products with PET film on the package's outer surface made of more than 80% recycled resin *Major bottled coffee products with a PET resin bottle made of 100% recycled resin</p>	<p>CO₂ absorbing packaging</p> <p>These products use materials that absorb CO₂ emitted during packaging incineration.</p> <p>味なエコ</p> <p>® CO₂吸収材でエコ</p>
<p>Sustainable timber</p> <p>The packaging material of these products contains paper certified by the FSC^[1], indicating that it was produced from responsibly managed forests.</p> <p>[1] Forest Stewardship Council® Ajinomoto Co., Inc. FSC®N002688, Ajinomoto AGF, Inc. FSC®N002418</p>	<p>Refillable</p> <p>Reusing glass containers for a long time and refilling the contents from packets can reduce overall environmental impact.</p> <p>味なエコ 詰め替えてエコ</p> <p>® 詰め替えてエコ ® 詰め替えてエコ</p>
<p>Recycled paper</p> <p>These products actively use recycled paper containing more than 80% recycled pulp to make careful use of resources.</p>	<p>Ecological thinning</p> <p>These products use packaging material that contains pulp^[2] from ecological forest thinning. The container packaging has been certified by the Forest Thinning Mark Certification Committee.^[3]</p> <p>[2] More than 10% pulp from forest thinning [3] Committee of the National Federation of Forest Owners' Coop Associations</p> <p>味なエコ</p> <p>® 再生紙でエコ</p> <p>間伐材でエコ</p> <p>® 間伐材でエコ</p>
<p>Reduced packaging</p> <p>These marks are displayed on products that use less packaging material than conventional products.</p>	<p>No tray</p> <p>These frozen food products are packaged in a large bag without a tray inside. It reduces the amount of waste, thereby lowering CO₂ emissions by about 20% to 50%.</p> <p>味なエコ</p> <p>® トレイなしでエコ</p>

Easy separation

The packaging materials of these products are designed for easy recycling and disposal.

After use, cap can be separated easily. **はずせるキャップでエコ**

Glass bottle labels can be peeled off easily. **はがしやすいでエコ**

Reference →

***Aji-na Eco* mark (Japanese)**
<http://www.ajinomoto.com/jp/activity/environment/eco/life.html>

***Hotto-suru Eco* mark (Japanese)**
<http://www.agf.co.jp/csr/eco/>

Initiatives in Logistics

The Ajinomoto Group is reducing its environmental impact, from raw material procurement to product delivery, to address many issues facing the food industry logistics.

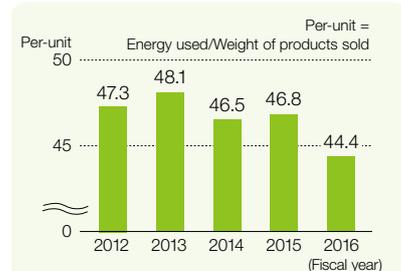
Initiatives as a consignor

Japan's Energy Saving Act revised in April 2006 obliges specified consignors to reduce per-unit energy use (crude oil equivalent) from transport and delivery by at least 1% per year on average over five years and report it to the government. This applies individually to Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc.

For the three companies combined, per-unit energy use declined 1.6% per year on average in the five years to fiscal 2016, and also declined year-on-year in fiscal 2016. These achievements were due to efforts in cooperative distribution, an increase in direct shipments from company factories to customers, and a reduction in delivery vehicles made possible by loading efficiency improvements.

Going forward, the Ajinomoto Group is working to meet the legal requirement of a 1% annual reduction.

Per-unit energy use in logistics [1]



Energy use from transport declined

1.6% per year on average over five years

[1] Combined results of Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc.

Modal shifts in the Ajinomoto Group

Modal shift^[2] efforts in the Ajinomoto Group began in 1995, headed by Ajinomoto Co., Inc.'s Logistics Planning Department and AJINOMOTO LOGISTICS CORPORATION. Two companies are addressing both the enhancement of transport capacity and eco-friendly logistics.

Until 2012, only rail transport was used in Japan for distances of 500 km or more, but the use of ship transport is now being increased. Ships are now used to transport products from Kanto to Hokkaido, Kansai to Kyushu. Meanwhile, rail transport has been enhanced by utilizing efficient 31-foot containers. In fiscal 2016, the modal shift percentage of Ajinomoto Co., Inc. was 79%. Continued efforts will be made in this area, overseas subsidiaries included.

[2] Changing to modes of transport with lower environmental impact, including rail and ship transport. Railway container and ship transport produce one-eighth and one-fifth of the CO₂ emissions of trucking, respectively.

Modal shift percentage of Ajinomoto Co., Inc.

500 km or more

79% (rail 35%, ship 44%)



Cargo ferry used in ship transport

Modal shift at Ajinomoto Heartland LLC

The Eddyville Factory of Ajinomoto Heartland LLC has shifted from truck to rail transport by extending the nearby railroad line onto factory grounds. The modal shift, introduced in 2010, has reduced the number of trucks used by substituting 20 railcars for the approximately 80 trucks previously used per month to travel 100 kilometers to a railcar station. This has also decreased environmental impact, a 90% reduction when converted into CO₂ emissions.



Railroad tracks at the Eddyville Factory, Ajinomoto Heartland LLC



Railcar station in the Eddyville Factory



Products being loaded onto a railcar

Reduction of supply chain environmental impact by Industrial Engineering

In recent years, increased production and consumption have caused energy consumption and waste from excess inventory to rise to socially problematic levels. Supply chain management (SCM) of the Ajinomoto Group is becoming increasingly complex due to the trend toward high-volume, high-mix production. To address these issues, the Group has been actively using industrial engineering (IE)^[3] to raise sales revenue, reduce inventory, and improve distribution efficiency.

[3] An engineering field for the design and improvement of systems involving people, goods, and facilities.

SCM optimization through improvements in facility operating efficiency

In the ideal supply chain, products are delivered to the customer at the right time, the right place, and in the right amounts. Achieving this ideal requires improvements in demand forecast accuracy, production flexibility, and efficiency in the movement of goods. At the Ajinomoto Group, efforts are focused on improving methods of relaying SCM-related work information, and improving the operating efficiency of factories and warehouses. Multiple subsidiaries have realized weekly production systems, which are particularly effective for reducing inventories and keeping them at low levels compared to monthly production. Total SCM optimization also requires improving distribution as well as production efficiency. To do that, various sites are rebuilding their distribution systems. The Group will continue these total SCM optimization efforts while addressing the specific issues of each site.

Inventory reduction in Vietnam

Ajinomoto Vietnam Co., Ltd. has achieved a 25% inventory reduction in the first stage of an improvement project. The company introduced a weekly production and sales system for *Aji-ngon*® after first quantifying and setting priorities for cross-functional cooperation and SCM-related issues. Now the company is working to improve factory work quality and productivity. As a result, product inventories more than one week old declined not only at Ajinomoto Vietnam but across all food product group companies overseas in the fiscal 2014-2016 period.



Operation process and floor layout improved



Before



After

Further facility improvements at Ajinomoto Vietnam Co., Ltd. also led to significant gains in shipping efficiency

Relay Liner®: Better work environment for drivers and transport efficiency

The Ajinomoto Group is addressing the improvement of work conditions for long-distance truck drivers. Main issues include irregular work arrangements, the need to sleep in the truck, and long working hours. In August 2015, AJINOMOTO LOGISTICS CORPORATION started using the Relay Liner®, which allows drivers from the Mie and Kuki Distribution Centers to return on the same day by exchanging entire loaded trailers at a midpoint in Shizuoka. The introduction has alleviated driver burden by eliminating overnight stays, and also made time management easier, making it especially popular among women drivers.

Relay Liner®



Thanks to midpoint deliveries with Relay Liner®, I drive one day a week. The Relay Liner® is a fixed route with a set schedule, so I know what to expect and can also use my time effectively on days when I drive. It gives me much-appreciated time to spend with family or for myself.



Miki Ichikawa, Tokai Ace Logistics Corporation

Environmental Management

The Ajinomoto Group has been using an environmental management system (EMS) that conforms to the ISO 14001 standard at each Group site, including overseas locations. The standard, revised in 2015 for the first time in 11 years, has shifted focus to more strategic environmental management that contributes to corporate competitiveness. It also includes a “life cycle approach,” which moves beyond the previous site-specific emphasis on factories and premises to consider entire business processes instead.

Group-wide environmental management

The Ajinomoto Group advances environmental management through a structure headed by the Management Committee. This structure decides important environmental policies, prepares plans (medium and long-term targets, annual plan), and conducts activity reviews.

Group-wide environmental management activities

After consolidation of group companies and some factory construction in fiscal 2016, the Ajinomoto Group had a total of 140 sites subject to environmental management (as of March 2016), of which 118 have acquired ISO 14001 certification. Sites not yet certified are advancing management based on the ISO 14001 approach.

Essential to promoting group-wide environmental management is the ability to visualize performance objectively. Group companies are now using a new system called ACSES^[1] to collect environmental data, and instead of collecting data twice a year, can now report results monthly, aligned with actual operations of the organization. The data is being used in site-specific activities, to manage the progress in the Group on environmental performance, and for external information disclosure, such as to CDP.

[1] ACSES: Ajinomoto Group Communication System for Environment and Safety

Fiscal 2016 performance

Environmental management

ISO 14001 certification had been acquired at

118 sites, or 84% of all target sites (As of March 2016)

Ajinomoto Group's EMS organization



■ Environmental assessments

When the Ajinomoto Group launches new products and businesses, or changes the use of conventional raw materials in production processes, it assesses the environmental impact of business plans before they are conducted, and takes necessary measures to minimize future risks. Environmental assessments are performed by departments responsible for the proposed plans, and their results are reviewed from a group-level perspective by the Production Technology Strategy Department before final approval. In April 2010, the authority to conduct environmental assessments for launching new or renewed food products was partially delegated to some business sites in the ASEAN region to reflect local environmental circumstances more appropriately.

Performance evaluations of group companies and organizations also include an environment category, reflecting its high priority among business activities.

■ Environmental audits

The Ajinomoto Group values environmental audits as an indispensable management tool. In addition to external audits for compliance with ISO 14001 standards, environmental audits are also conducted for sites having issues. In Japan, internal environmental auditors attend lectures from outside instructors to increase their expertise, and this helps to strengthen the overall environmental management system. Starting in fiscal 2016, lectures for internal auditors have been held based on the 2015 version of ISO 14001 to bolster the training for the new standards across the Group.

■ Factory efforts for local community and response to environmental accidents

The Ajinomoto Group promotes open communication with neighborhood residents. The Group values a good relationship through communication with the community by participating in neighborhood association and council meetings, and asking residents to call the factory immediately when they have something to say or when they notice anything unusual in their environment such as a strange odor or noise. Overseas factories conduct factory tours for community residents and ask for feedbacks on their environmental initiatives.

The Group has built a system for quickly addressing any legal violations or accidents related to the environment. In fiscal 2016, there were nine violations, and of these, six were on waste disposal violations. None were subject to penalties and all were self-reported to the proper authorities, which involved the manifesto storage period, written errors in the manifesto, or consignment contract deficiency with the industrial waste disposal company. The other three cases were violations related to factory wastewater quality standards. Proper corrective actions and legal measures based on administrative guidance are being performed.

There were six environmental accidents in fiscal 2016. Aside from the previously given three wastewater violations, another three involved (1) leakage of raw material, vegetable oil from a pipe flange, which caused the oil to flow out of the premises through the rainwater drainage system, (2) fuel leakage into public roads when the connecting hose broke in the fuel tank of a distribution truck entering a customer warehouse for loading, and (3) discharge exceeding wastewater standards due to insufficiently closing the shutoff valves of all the factory's drainage ports for some irregular work. None of these had serious environmental effects. The accidents were immediately reported to authorities and investigated for their causes to take necessary measures.

The Ajinomoto Group will continue to share information group-wide on environmental regulatory violations and accidents, and work to prevent their recurrence.

■ Environmental assessment items

① Legal compliance	
② Seven types of typical pollution	Air pollution, water pollution, noise, odor, soil contamination, etc.
③ Global environmental issues	Saving energy, renewable energy use, chlorofluorocarbons, distribution efficiency, etc.
④ Food loss reduction	Extension of best-before dates, MMY labeling, etc.
⑤ Sustainable procurement	Biodiversity conservation, certified ingredients, certified paper, bioplastics, etc.
⑥ Water resources	Water use and wastewater reduction
⑦ Waste disposal	Proper waste disposal, responsibilities of waste generator, etc.
⑧ Creation of a recycling-oriented society	3Rs, excess packaging, effective use of co-products, waste generation reduction, etc.
⑨ Management of hazardous substances	New chemical substances, PCB, asbestos, etc.
⑩ Effects of buildings	Right to sunlight, radio wave disturbance, etc.
⑪ Consumer awareness of green living	Environmental labeling



Environmental monitor meeting at Kawasaki Administration & Coordination Office of Ajinomoto Co., Inc.

Environmental Education and Awareness Raising

Ensuring that every employee has a strong environmental awareness is the starting point of all environmental protection efforts at the Ajinomoto Group. The Group provides its employees around the world with various opportunities for systematic environmental education and fosters better awareness to encourage them to take specific action in their respective workplaces.

Specialized education and training

Environmentally responsible businesses activities require employees to constantly improve their expertise and skills. The Ajinomoto Group provides ongoing education to environmental managers in each organization, as well as environmental assessment training for members of each division and research department developing new businesses and products. By March 2017, 110 two-day training courses for internal environmental auditors were held, attended by a total of more than 2,800 participants. Training for them also began in January 2016 on the ISO 14001 standard 2015 edition, with seven seminars held for 214 participants.

With environmental concern evolving from a focus on pollution control to broader protection of the global environment, the frequency of legislation and revision of environmental regulations is on the increase. The Ajinomoto Group stays up-to-date with these changes and takes the steps needed to stay compliant. To aid this effort, the Group started environmental law seminars for EMS staff in Japan in fiscal 2011, providing practical knowledge of laws particularly relevant to the Group's business. In fiscal 2016, the seminars delivered information on amendments to Japan's Waste Disposal Law and their practical application, and on recent legislative developments. The Group is also enhancing its practical education on compliance on chemical substance management by offering regular seminars to the employees concerned.



Group work at an internal environmental auditor lecture



Environmental law seminar on waste disposal

Education and awareness-raising activities

The Ajinomoto Group educates employees and raises their awareness of environment issues, to help build a more sustainable world through its diverse businesses. Human resources, general affairs, risk management and other departments collaborate in providing ongoing education tailored to each employee grade to ensure everyone understands the Group's environmental initiatives. In compliance trainings organized by Business Conduct Committees for managers of group companies in Japan, the environment has been a theme since fiscal 2012. The trainings help managers understand their roles and group policies to fulfill corporate social responsibilities for increasingly diverse environmental issues. Ajinomoto Co., Inc. also offers environmental education for each personnel level, including new employees and new managers. Every year since fiscal 2007, the Group has run a campaign to foster social and environmental awareness as part of its Smile Earth! activities. In fiscal 2016, a campaign to reduce food loss was rolled out worldwide. Starting from fiscal 2017, globally coordinated programs will shift to community-based activities to better fit local conditions.



Materials for compliance trainings

Structure of environmental education

	Group companies in Japan	Ajinomoto Co., Inc.
Specialized education	<ul style="list-style-type: none"> • Training for environmental managers/staff • Lectures for internal environmental auditors 	<ul style="list-style-type: none"> • Environmental assessment seminars
General education	<ul style="list-style-type: none"> • Compliance training 	<ul style="list-style-type: none"> • Training for new managers • Training for new hires • Training for mid-career hires • Training for staff to be posted overseas
Group-wide awareness-raising activities <ul style="list-style-type: none"> • Smile Earth! environmental awareness campaign 		

Consumer Issues

A Consumer-Driven Approach to a More Sustainable World

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- Promotion of “eco-friendly food life style” through products, recipes and advertising
- Ajinomoto Eco-Friendly Eating KIDs Prize awarded to tomorrow’s leaders
- Promotion of environmental food lifestyles at home
- Partnership with Kawasaki City and Kao Corporation on sustainability education
- Communication with consumers at the Eco-Products 2016 exhibition
- Forums for envisioning an ideal future

Related company policies

● Ajinomoto Group Principles

<https://www.ajinomoto.com/en/activity/policy/>

● Ajinomoto Group Quality Policies

https://www.ajinomoto.com/en/activity/policy/quality_policies.html

● Ajinomoto Group Food Safety Policy

https://www.ajinomoto.com/en/activity/policy/food_safety_policy.html

● Ajinomoto Group Package Description Policy

https://www.ajinomoto.com/en/activity/policy/package_description_policy.html

● Privacy Policy

https://www.ajinomoto.com/en/activity/policy/privacy_policy.html

Fiscal 2016 activity highlights

- Enhanced a structure to guarantee food safety



→ P121-122

- Ajinomoto Eco-Friendly Eating KIDs Prize



→ P134

Food Safety and Security

The Ajinomoto Group applies its own quality assurance system, the Ajinomoto System of Quality Assurance (ASQUA), to all of its products and services. The Group is committed to providing product safety and quality by conducting strict quality assurance from raw material procurement to product sales.

Quality assurance system of the Ajinomoto Group

Ajinomoto System of Quality Assurance (ASQUA)

Established in 1997, ASQUA is the Ajinomoto Group's own quality assurance system. Its core content is based on ISO 9001, the international quality management system standard, and supplemented by manufacturing management standards such as Hazard Analysis and Critical Control Points (HACCP)^[1], and Good Manufacturing Practices (GMPs).^[2] The system is also administered under the Quality Policies, Quality Assurance Regulations, Regulation for Quality Assurance, Quality Standards, and other rules and requirements established by the Group or each internal organization. With ASQUA, the Group carries out thorough quality assurance activities worldwide, from the procurement of raw materials to the sale of products, always pursuing even higher quality manufacturing. Customer requests and expectations are also promptly utilized to improve products, services, and business operations.

The Quality Assurance Regulations were revised in fiscal 2016 with the aim of further strengthening global governance on quality assurance. The establishment of an ASQUA-based quality assurance system has also started in the major Turkish food company Örgen Gıda Sanayi ve Ticaret A.Ş., which recently joined the Ajinomoto Group through M&A.

Conforming to ASQUA will continue to be a priority in the future.

[1] Management standards for manufacturing foods in a safe and sanitary manner.
[2] Standards relating to manufacturing management.

Ajinomoto Group's Quality Standards

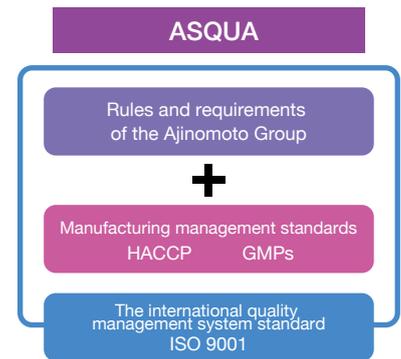
In ASQUA, the Ajinomoto Group established its own standards and strictly enforces these standards to ensure that products maintain the level of quality expected of the Ajinomoto Group brand.

The quality standards comprise 28 different standards that cover various aspects of raw material purchasing, manufacturing, quality assessment, storage and transport, product sales, and customer services, with new regulations and revisions introduced to match group and social goals. The Standard for Quality Assessment was revised in fiscal 2016.

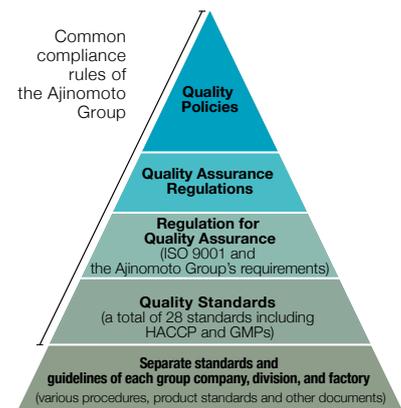
Ajinomoto Group's Quality Standards (examples from among the 28 standards)

Standard for Quality Assessment	Standard for Food GMP	Standard for Food Defense ^[5]
Standard for Educational Training on Quality	GMP Standard for Pharmaceutical Drug Products	Standard for Traceability
Standard for Halal ^[3] Control	Standard for HACCP	Standard for Handling of "Voice of Customer"
Standard for Kosher ^[4] Control	Standard for Quality Control of Subcontracted and Procured Products	Standard for Management of Warehouses
Standard for Product Labeling	Standard for Responding to Complaints	
Standard for Quality Control of Raw Ingredients	Standard for Determination of Responding to Quality Emergencies	
Standard for Safety and Sanitation of Food Packaging Materials		

ASQUA framework



ASQUA components



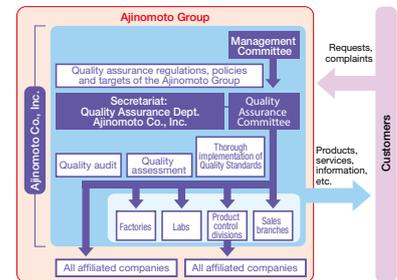
[3] Foods permissible to eat under Islamic dietary restrictions.
[4] Foods permissible to eat under Jewish dietary restrictions.
[5] Measures to prevent deliberate tampering with products. Monitoring is carried out at every stage from raw material procurement to product sales.

Organizational framework for ASQUA implementation

The Quality Assurance Committee attended by senior management is the highest organ for quality assurance in the Ajinomoto Group. The Committee considers customer feedback to draft its basic policies and plans, and after approval by the Management Committee, promotes their group-wide implementation. The status is reviewed by the Committee every six months.

This framework ensures that everyone, from top management to frontline employees, maintains a strong awareness of product quality and a total commitment to providing safe and high-quality products that are worthy of consumer trust.

Organizational framework for ASQUA implementation



Initiatives in fiscal 2016 and beyond

The 2014–2016 Ajinomoto Group Medium-Term Plan for Quality Assurance, continuing from previous years, sets out three guidelines: “Keep faith with customers,” “Fulfill customers’ expectations,” and “Aim for adequate management.” Based on these, new objectives were set, including: “Strengthen the food safety system,” “Prevent health damage,” and “Utilize the voice of the customer to offer products with new value and appeal.” As the final year of the medium-term plan, the following initiatives were undertaken globally in fiscal 2016.

Structural enhancement to guarantee food safety

In December 2013, a frozen food product produced by another company in Japan was found to be contaminated with pesticide. Following this incident, the Ajinomoto Group has been working to minimize the risk of intentional product tampering across the Group’s worldwide supply chain, aiming to deliver even more reliable products to customers. As shown in the diagram, measures include fostering a good organizational culture based on trusting relationships with employees, and revising and strengthening hardware elements such as manufacturing equipment and software elements such as quality standards and guidelines. The Ajinomoto Group aims to largely complete the implementation of these measures in Japanese factories by the end of fiscal 2016, and group-wide by the end of fiscal 2017.

Diagram of food safety assurance concept



Stronger food-safety systems: Delivering reliable products to customers

To ensure additional peace of mind for our customers, the Ajinomoto Group is strengthening food safety assurance systems in line with the ASQUA Food Defense Standards and other related standards (see P119-120). Examples of such efforts are described below.

■ Kawasaki Factory, Ajinomoto Co. Inc.

Built in 1914, the Kawasaki Factory has the longest history of any factory in the Ajinomoto Group worldwide. It manufactures a diverse range of products for commercial as well as consumer use, including *HON-DASHI*® and *Cook Do*®. The factory is working to fortify its food safety systems following its own food defense standards based on ASQUA, and has been fully FSSC 22000-certified^[1].

To foster a good organizational culture based on trusting relationships with employees, the cornerstone of this initiative, the Kawasaki Factory created new fora of communication for all employees, including part-time workers. By holding leadership trainings and roundtable discussions in each factory building, it is working to instill awareness that providing assurance to customers is a priority from the start of work and that every employee is responsible for their own workplace.

The Kawasaki Factory is also minimizing overall risk through a combination of measures that include: installing quality assurance cameras at doorways in production areas, in storage areas where ingredients and products are exposed, and on production lines; managing personal belongings in production areas; and intensifying prevention of deliberate contamination.

[1] A standard enacted by the Global Food Safety Initiative (GFSI) by merging the ISO 22000, the international standard for food safety management systems, and PAS220, a food safety certification program for food manufacturers.



Team-building exercise to strengthen communication



Production workers sample the products they make



Quality assurance camera video in a production area



Locking of a process-water tank outside the production area



Managing entry into a production area

■ Nong Khae Factory, Ajinomoto Co., (Thailand) Ltd.

The Nong Khae Factory in Thailand has GMP, HACCP, ISO 9001, ISO 14001, and OHSAS 18001 certification. The factory manufactures products for international markets in compliance with those standards, including *Ros Dee*® seasoning for Thailand.

The factory is strengthening its food safety systems based on the AJT^[2] Way of Thinking, an articulation of Ajinomoto Co., (Thailand) Ltd.'s own approach to food defense in line with the ASQUA Food Defense Standards.

To foster a good organizational culture, the factory is stepping up communication by holding food defense study meetings with all relevant personnel, and monthly subcontractor meetings where regular employees and part-time workers share information and together devise solutions to problems that arise. The factory is also striving to build trust in employees by awarding those who promptly report problems they find, based on the slogan "Dare to Tell."

The factory is also intensifying security management with newly installed fingerprint authentication, locks, alarms, and



Awarding an employee for practicing "Dare to Tell"

other systems for entering factory buildings and production areas. In areas where contamination risk is high, it has installed quality assurance cameras and also added numbers to work caps so employees can be more easily identified. These measures are part of a transparency program that will enable even customers, employees, and other third parties to verify product safety.

[2] AJT; Ajinomoto Co., (Thailand) Ltd.

■ Kanto Factory, Ajinomoto Frozen Foods Co., Inc.

The Kanto Factory was one of the factories in the global Ajinomoto Group that strengthened its food safety systems following an incident in 2008 involving pesticide contamination of frozen foods produced by Tianyang Food Processing Ltd. Active even now, the factory is advancing "factory visualization" to enable customers to directly observe its safety and reliability efforts. For example, production lines for products ranging from consumer frozen foods such as Gyoza (Chinese dumplings) to commercial cakes and other desserts can be viewed through glass windows from a tour corridor.

Visitors on the tour can also freely operate the quality assurance cameras installed on the production line to inspect from various angles.



Direct views of the production line through glass windows



This system allows visitors to inspect the production line by freely changing the angle of quality assurance cameras



Susumu Tsutsumi

Quality Management Group Manager
Kanto Factory, Ajinomoto Frozen Foods Co., Inc.
(position as of June 2017)

A pesticide contamination at another company's nearby frozen food factory left everyone working at the Kanto Factory feeling shocked and dismayed. The incident forced us to recognize that food contamination is a serious risk that can happen anywhere, and the desire to keep it from being "someone else's problem" impelled us to reinforce our own food safety systems.

Tangible preventive measures—quality assurance cameras, protective covers at key locations, locks, etc.—are important too, but as a frozen food factory with numerous production line workers, our focus has been creating an environment where it is easy to work, where workers can feel free to express any concerns or dissatisfaction they might have. The goal of this initiative is to increase communication between employees so they improve the workplace on their own, with everyone a contributing member, not in a forced, top-down manner. While there was a sense of forcefulness at first, thanks to the organizers' creative efforts and everyone's involvement, the program has invigorated the entire factory like nothing before.

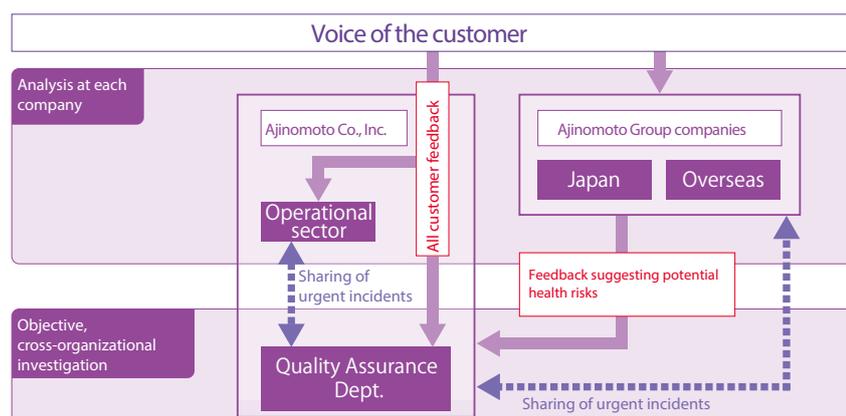
■ Enhanced monitoring of customer feedback to prevent health damage

In July 2013, a cosmetics manufacturer in Japan was responsible for health damage caused by a skin brightening product. To prevent any similar incidents, the Ajinomoto Group is strengthening its customer feedback monitoring system to ensure that the voice of the customer is never overlooked, with the aim of preventing serious problems such as health damage and regulatory violations. Each group company regularly investigates all voices of customers it collects. Now, in addition to the above, the Quality Assurance Dept. of Ajinomoto Co., Inc. also rapidly confirms and analyzes in a cross-organizational manner the voice of any customer dealing with an actual or potential health damage. For incidents deemed emergent, Ajinomoto Co., Inc. has established a system for rapidly sharing customer feedback with the relevant departments in Japan.

In fiscal 2016, monitoring based on the new system is conducted in group companies in Japan and in subsidiaries in Thailand, Brazil, Indonesia, and Vietnam that have already introduced this system. The system was also established in subsidiaries in the Philippines and Peru.

The Group will continue to further enhance the monitoring system and extend it to other overseas subsidiaries.

■ Customer feedback monitoring system for preventing health damage



■ Initiatives to reduce quality-related claims and incidents

The Ajinomoto Group carefully investigates each quality-related claim and incident to identify the cause and prevent recurrence.

Among these, there was an increasing trend in incidents caused by human error, such as a best before date misprint, in fiscal 2015. To prevent similar incidents, information on the incidents were thoroughly shared across the Group in fiscal 2016. In the Ajinomoto Management and Technical Conference on Quality, a quality assurance education program in Japan, the organizations and companies shared information on their efforts and exchanged ideas on the topic of "preventing human error", which served to enhance individual employee awareness and improve workplace conditions.

In fiscal 2016, the Ajinomoto Group issued six product recalls and collections from distributors (one in Japan, five overseas). To prevent similar incidents going forward, the Group will strengthen the aforementioned initiatives.

Rigorous supplier audits and quality control

The Ajinomoto Group applies the quality control standards and quality requirements of ASQUA also to the management of its manufacturing subcontractors and raw materials suppliers. In addition to regular assessments and quality audits, the Group also works with suppliers to reduce quality risks, improve quality levels, and achieve other objectives based on the Supplier Partnership Program (SPP).

In fiscal 2016, in addition to planned quality audits at suppliers in Japan, food defense audits^[1] have also been conducted since fiscal 2015 to strengthen supplier management.

For overseas suppliers, the Ajinomoto Group has established the Global Supplier Management (GSM)^[2] system for carrying out mutually cooperative quality audits between overseas companies. In fiscal 2016, GSM auditors were increased in the United States to strengthen supplier management and leverage GSM audits.

Moving forward, the Group will further strengthen partnerships with suppliers through SPP while actively conducting GSM overseas to ensure provision of safe products to customers.



Rigorous supplier audits

Quality audits of raw material suppliers in fiscal 2016

Department conducting the audit	Audited items	Number of audits	Remarks
Group Procurement Center, Ajinomoto Co., Inc.	Raw materials	107	Food:64 AminoScience:43
	Packaging materials	24	
Ajinomoto Frozen Foods Co., Inc.	Raw materials	180	
	Raw materials	37	Includes 4 cooperative purchase
Ajinomoto AGF, Inc.	Packaging materials	11	
	Subcontractors' products	26	

[1] Audits specifically intended to prevent intentional contamination of food products

[2] The Ajinomoto Group's unique system of mutually cooperative quality audits at its group companies outside Japan for strengthening quality management at raw material suppliers.

Third-party certification

In addition to third-party ISO 9001 certification, the Ajinomoto Group has obtained Food Safety System Certification (FSSC) 22000 at manufacturing sites around the world in response to customer requests.

In fiscal 2016, organizations and subsidiaries that had already obtained ISO 9001, FSSC 22000, and other certifications maintained their status; PT Lautan Ajinomoto Fine Ingredients, a joint venture founded in 2013, obtained ISO 9001 certification; PT AJINOMOTO BAKERY INDONESIA and AJINOMOTO INDIA PVT. Ltd. obtained ISO 22000 certification.

The Ajinomoto Group is also working to comply with various religious standards in production so that Muslims, Jews, and other people of faith worldwide can enjoy food with peace of mind. By obtaining Halal, Kosher, and other certifications, group companies are incorporating into their quality assurance activities methods of delivering the great taste that comes with a respect and understanding of religious dietary needs.

In fiscal 2016, the Kawasaki Factory of Ajinomoto Co., Inc. obtained new Halal certification for certain products.

The Ajinomoto Group will continue efforts to obtain GFSI certification in response to customer requests and to comply with religious standards, in addition to obtaining and maintaining ISO 9001 certification.

Human resources development to raise quality assurance levels

The Ajinomoto Group also utilizes human resources development to further improve quality assurance levels. Each year, the Group reviews its quality training plan, and implements training programs that meet the needs of each organization and company according to the plan.

In fiscal 2016, the Quality Assurance Dept. of Ajinomoto Co., Inc., systematically provided training for group employees in Japan on ISO 9001, quality audits, product labeling, compliance with religious standards, and other topics. It also held the 37th Management and Technical Conference on Quality, where some 430 employees in Japan shared information on their quality assurance efforts. Overseas, about 120 employees participated in ASQUA School^[1] sessions held in the Philippines, India, Indonesia, China, and North America. In addition, nine employees selected from companies in Brazil, Peru, Thailand, Indonesia, and India participated in the 16th Quality Management System (QMS) training course, where they spent two weeks studying a range of topics related to quality assurance and exchanged ideas for future initiatives.

Group companies worldwide also organized their own quality training to meet specific needs. For example, Ajinomoto Frozen Foods Co., Inc. held training on farm and pesticide management, product labeling, and food defense; Ajinomoto Co., (Thailand) Ltd. on food defense and GMP; Amoy Food Ltd. and Ajinomoto del Perú S.A. on food safety; and Ajinomoto (Malaysia) Berhad on ISO 9001 internal audits.

The Ajinomoto Group will continue to strive to further improve quality assurance level globally and utilize ICT^[2] to provide better programs.

[1] Practical quality assurance training focused on the Ajinomoto System of Quality Assurance (ASQUA).

[2] Information and Communication Technology

Quality training programs provided by Ajinomoto Co., Inc. in fiscal 2016 (partial list)

For group employees

- Ajinomoto Management and Technical Conference on Quality
 - QMS Training Course (overseas employees only)
 - ASQUA School (overseas employees only)
 - Top management study session on quality
 - Customer satisfaction training program
 - ISO 9001 internal auditor education
 - Quality audit seminar
 - Study session on food product labeling
 - Briefing on trends in government initiatives on food product labeling,
- etc.



Ajinomoto Management and Technical Conference on Quality
 Top: Poster session
 Bottom: New "Customer Satisfaction" corner for sharing various initiatives that incorporate customer feedback



QMS Training Course

For company employees

- Training for Japanese staff posted overseas
 - New employee training
 - Compliance training
 - Quality assessment study session,
- etc.

Quality-related information sharing

The Ajinomoto Group shares helpful information on its packaging, websites, and other places so customers can purchase and use its products with greater peace of mind.

1 Sharing quality information on product packages

The packages of retail products marketed by Ajinomoto Co., Inc.; Ajinomoto Frozen Foods Co., Inc.; and Ajinomoto AGF, Inc. indicate not only all legally required information but also the following kinds of quality-related information (except when space is limited, etc.).

- Method of storage (once opened)
- Product usage warnings
- Explanations of raw materials that may be unfamiliar to customers and prompt a large number of inquiries
- Easy-to-identify list of allergens (both mandatory and recommended)
- Easy-to-identify labeling of packaging materials
- Customer service contact

2 Providing quality information on websites

Group company websites inside and outside Japan strive to tailor information to their local customers, from product information and recipes, to FAQs and the company's quality assurance efforts. Ajinomoto Co., Inc.'s product information website^[3], Ajinomoto Frozen Foods Co., Inc. and Ajinomoto AGF, Inc. websites provide various information on their respective quality assurance systems and other management activities intended to assure the quality and safety of products across the range of processes from raw materials procurement through manufacturing and sales.

In fiscal 2016, a new design came out for the quality assurance page in the previously mentioned Ajinomoto Co., Inc.'s product information website, which can handle various types of devices, such as smartphones and tablets, and provide web accessibility^[4], to respond to the changing internet access and diversity of customers visiting the site.

On the group corporate website^[4], the Ajinomoto Group added Vietnamese and Indonesian language versions of the section detailing the Group's quality assurance activities (in Japanese, English, and Thai). In 2017, the Group will add more languages such as Portuguese to the site and improve the content in response to customer requests.

[3] Ajinomoto Co., Inc. operates and manages two sites: the group corporate website, which focuses on the Group activities, and the product information website, which provides information on company products.

[4] Enables access and use of the website for seniors, people with disabilities, and others
Ajinomoto Co., Inc.'s web accessibility policy (Japanese)
<https://www.ajinomoto.co.jp/webaccessibility/>



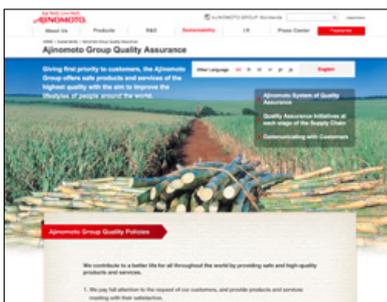
Ajinomoto Group's quality assurance website (Japanese)

<http://quality.ajinomoto.co.jp>



Ajinomoto AGF, Inc.'s website on safety and quality assurance (Japanese)

<http://www.agf.co.jp/csr/product/vcaction.html>



Ajinomoto Group corporate website
Ajinomoto Group Quality Assurance

English
<http://www.ajinomoto.com/en/activity/quality/>

- Japanese <https://www.ajinomoto.com/jp/activity/quality/>
- Thai <https://www.ajinomoto.com/en/activity/quality-th/>
- Vietnamese <https://www.ajinomoto.com/en/activity/quality-vi/>
- Indonesian <https://www.ajinomoto.com/en/activity/quality-id/>

Ajinomoto Group policies and initiatives available on the website

Use of food additives

Food additives not only enhance dietary lifestyles by improving taste, flavor, and nutritional content, but also have other important roles, such as improving the shelf life of food. They are subject to stringent testing under the supervision of governments to confirm their safety. The Ajinomoto Group selects appropriate food additives for use in product development and production based on the latest research findings on safety and other relevant issues. The Group is also committed to clear and accurate labeling of food additives on its product packaging, in accordance with standards stipulated in relevant laws. In recent years, the number of processed foods companies label as “Additive XX-free” or “No XX” on the market has increased. The Ajinomoto Group believes these labeling methods which give consumers doubts about food additives recognized as safe based on government standards and scientific research as potentially misleading, and does not use such labeling.

Allergens

In order to protect people with certain allergies, Japan’s Consumer Affairs Agency requires food products in Japan to display information on whether they contain seven common allergens: wheat, milk, peanuts, eggs, buckwheat, shrimp and crab. It also recommends disclosure of 20 other allergens. The Ajinomoto Group in Japan not only labels the seven allergens required by law, but also lists 20 other allergens when contained in any of its retail products for general consumers. The Ajinomoto Group is also focused on strengthening its allergen control system by incorporating official analytical methods and contamination^[1] controls.

[1] Microbial amounts of allergen substances mixing with food products during the manufacturing process despite the fact that these substances are not used as ingredients in the product.

Best before date

The Ajinomoto Group conducts various tests for product properties under certain storage conditions to determine product shelf life (best-before date), within which the product maintains its value as food and preserves the delicious flavor expected by consumers.

While the flavor is chemically and physically changed, the color, taste, aroma, and other properties are evaluated through sensory tests and instrumental analyses to determine the limit of flavor retention. To set the appropriate best-before date for each product, temperature conditions are varied while quality deterioration is tracked over time.

Storage condition	<ul style="list-style-type: none"> - Packaging material, packaging form - Storage environment (temperature, humidity, light, etc.)
Evaluation item	<ul style="list-style-type: none"> - Sensory evaluation (appearance, aroma, food texture, flavor, taste, etc.) - Physical property tests (viscosity, hardness, granularity, color, fluidity, etc.) - Physicochemical tests (pH, acid value, peroxide value, etc.) - Microbial tests (total viable count, fungus count, coliform bacteria, sterility test, etc.)

Best-before date label changed to month-year

Food loss is a global issue. In Japan, 6.21 million tonnes annually^[2] are thrown away while still edible. As a nationwide issue, the Ajinomoto Group is working through public and private sector partnership toward making the entire supply chain more efficient. This initiative includes changing the best-before date label to month-year, extending best-before dates, and optimizing deliver-before dates.

Ajinomoto Co., Inc., as one approach to this issue, launched in February 2017 an initiative to extend the best-before dates and switch to month-year labels for three types of home-use products with shelf lives of more than one year^[3] that have passed validation tests for date extension. Labels for all home-use products are scheduled for conversion in stages until the end of fiscal 2019.

[2] *Statistical Survey on Food Loss* (Ministry of Agriculture, Forestry and Fisheries, 2014)

[3] Although month-year labeling is legally allowed for products with expiration dates of three months or more, Ajinomoto Co., Inc.’s policy is to introduce month-year labels on products with expiration dates of one year or more, in accordance with the July 2014 report to METI’s Manufacturer, Distributor and Retailer Partnership Convention, stating that the implementation of month-year labels will generally begin with products having expiration periods of one year or more.



Best-before date label changed to month-year

Reference →

Special Feature 2 P38

Reduction of food loss in society

Pesticide residue

Pesticides are used for the cultivation of healthy vegetables to prevent pests and diseases and control plant growth. To prevent pesticide residues remaining in food from adversely impacting human health, residue limits are set based on the laws of each country.

To ensure the safety of the vegetables it uses as ingredients, the Ajinomoto Group uses vegetables from Group-managed farms^[4] and designated farms^[5] for certain products; these farms are managed in a comprehensive manner that includes pesticide use. For other vegetable ingredients, the Group requires suppliers to have strict management systems for pesticides and other risks, and also visits production sites to inspect and provide appropriate guidance. The Group also conducts residue analysis as needed using measuring instruments and the assay techniques it has developed for such purpose.

[4] Under the supervision of employees from the Ajinomoto Group, farms operated according to uniform standards for every process from crop cultivation through pesticide management.

[5] Farms that meet the Ajinomoto Group's rigorous standards on pesticide management systems and are subject to regular Group inspections.

Use of GMOs

Genetically modified organism (GMO) technology is expected to play an important role in the mitigation of environmental problems and food shortages. For instance, crops genetically modified for insect resistance may not need as much pesticide. At this time, it is also important to thoroughly confirm the safety of GMO foods. In Japan, stringent safety assessment of GMOs is conducted by the Food Safety Commission of the Cabinet Office and the Ministry of Health, Labour, and Welfare. Labeling standards have been established in order to provide necessary information to customers, and the Ajinomoto Group faithfully complies with them.

Traceability

The Ajinomoto Group has created a traceability system for the history of raw materials and products. In each stage of production, processing, and distribution, information is recorded and stored concerning raw material and/or product suppliers, delivery destination, and product manufacturing so that the movement of all raw materials and products can be traced. The Group also carries out proper supplier management, which is essential for obtaining accurate raw material information.

This dependable traceability system helps the rapid handling of customer inquiries and any incidents that may arise, allowing consumers to purchase products with confidence.

Radioactive contamination

In Japan today, the safety of manufactured foods regarding radioactive contamination is being confirmed through continuous monitoring for radiation by government agencies, as well as through practices that prevent the distribution of food products that exceed regulatory limits. Going one step further, the Group uses measurement equipment and reputable analytical techniques to check, if necessary, for radioactive materials, especially in raw materials.

Overseas, subsidiaries such as Ajinomoto do Brasil Ind. e Com. de Alimentos Ltda., Ajinomoto Co., (Thailand) Ltd., and Ajinomoto Vietnam Co., Ltd. have also developed systems to efficiently relay customer inquiries, suggestions, and requests internally for improving products and services^[2].

The entire Ajinomoto Group will continue to take extra steps to improve customer service quality and use VOC to deliver better products and services.

[2] Group companies that do not have a dedicated customer call center handle customer service inquiries directly by phone and online.

Major group companies outside of Japan with customer call centers

- Ajinomoto do Brasil Indústria e Comércio de Alimentos Ltda.
- Ajinomoto Co., (Thailand) Ltd.
- PT Ajinomoto Indonesia
- Ajinomoto Vietnam Co., Ltd., etc.

Note: Group companies that do not have a dedicated customer call center handle customer service inquiries by directly phone and online.

Key initiatives of the Customer Service Center of Ajinomoto Co., Inc. in fiscal 2016

Key initiative	Details
Employee education program for improved customer service quality	Provided education and training to enhance listening and communication skills, and continued evaluations and training based on performance indicators
Improving systems to share the voice of the customer (VOC)	<ul style="list-style-type: none"> • Promptly shared VOC through internal meetings and the intranet to improve products and services • Conducted product evaluations from customer perspective at quality assessment meetings in product development phase • Shared examples of VOC-inspired improvements with group companies around the world
Improving responses to customer feedback	Improved documents for reporting on investigations of customer feedback
In-house training on customer satisfaction	<ul style="list-style-type: none"> • Conducted experiential workshop on customer perception, workshop on VOC analysis and use, etc. (approx. 170 employees participated in eight training sessions) • Held trainings by Global Human Resources Dept. (job shadowing for new employees and administrative employees being promoted) • Conducted tiered feedback response training for sales division (new employees, new supervisors, new line managers), compliance training

VOICE Job shadowing program for administrative employees being promoted

Comment from an HR training organizer

We had 13 participants, mostly from research and project support functions, which rarely have direct contact with customers. Trainees analyzed multiple examples of customer feedback to identify their core issues. They then practiced writing helpful responses, using actual survey reports to previous product investigations as source material. This program was developed in fiscal 2016 to help employees see products from the customer's perspective and use what they learned in their own work. Participant satisfaction has been exceptionally high, in part because the program doesn't stop at simply reviewing actual customer feedback, but also attempts to facilitate learning and discovery for the purpose of individual work. We have received comments on the training's value, such as "I was impressed with the efforts to understand the customer" and "This should be used in trainings beyond job shadowing." We hope to apply this curriculum to other training programs going forward.



Members of Global Human Resources Dept. and Customer Service Center who organized the training program

Efforts to improve customer satisfaction of product investigations

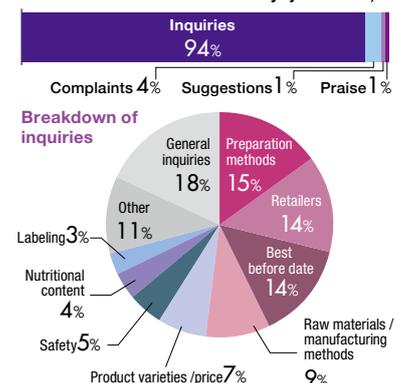
Five food product companies in Japan regularly conduct a questionnaire survey to confirm customers' satisfaction with the quality of responses to their feedback on product defects, from service representatives' communication to reporting of the investigation results. Three relevant divisions (investigation, business, and customer service) have worked to improve the report by adding points of customer doubt and concern and explaining the results more clearly.

In fiscal 2016, Ajinomoto Co., Inc. shared the human error prevention aspects of this work at Ajinomoto Management and Technical Conference on Quality to advance similar initiatives across the Group. The fiscal 2016 survey indicated that 97% of customers were satisfied with company responses to issues they raised, 82% were satisfied with the survey report, and 94% will continue to use Ajinomoto Co., Inc. products. Specific feedback received will be used for improvement activities next fiscal year.

VOC breakdown in fiscal 2016

VOC contacts received by Ajinomoto Co., Inc.: 34,000 (89% of the total in fiscal 2015)
 VOC contacts received by five of the Ajinomoto Group's food product companies in Japan: 69,000 (94% of the total in fiscal 2015)

Breakdown of VOC contacts received by Ajinomoto Co., Inc.



Rigorous management of personal information

In order to securely manage personal information including customer data, the Ajinomoto Group clearly defines rules and procedures to ensure that group companies concerned follow them, as part of organizational business management.

At Ajinomoto Co., Inc., the Personal Information Management Guidelines in the Information Management Regulations specify rules and procedures for securely handling personal information. These guidelines are based on the ISO 27001 standard for information security management systems.

Ajinomoto Co., Inc.'s information handling rules are covered in grade- and job-specific security training, such as programs for new hires, managers, and sales staff. When operations are outsourced, the contractor's business and system conditions are assessed to ensure the same high level of information security. To ensure security, personal information is centrally managed in a company-wide database.

Ajinomoto Co., Inc. introduced stricter measures for managing customer personal information, revising rules in December 2016 on the collection of personal information for campaigns and consumer surveys. The rules demand the selection of personal information managers^[1] under the jurisdiction of organizational managers, and clarify the persons responsible for or in charge of the collection, storage and deletion of personal information, as well as who might access or use the collected data.

Following revisions to the Personal Information Protection Law in May 2017, Ajinomoto Co., Inc. has revised its internal processes and handling guidelines, and is regularly educating those responsible for managing personal information in each organization.

Reference

Organizational Governance P54
Thorough information security

[1] personal information managers

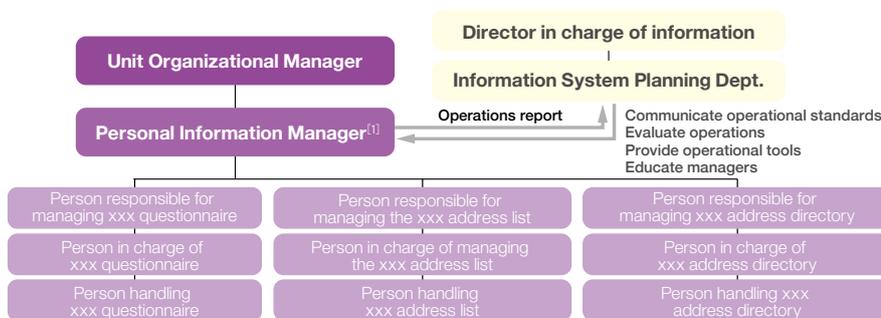
Selection process:

Unit manager selects from a person in a core position within the organization Registers the application with the Information System Planning Dept.

Role:

- 1) Oversight of personal information-related business within the organizational unit (adherence to rules, ensure appropriateness)
- 2) Due diligence of business contractors based on business audits and audit results
- 3) Education on handling of personal information within the organizational unit

Management of personal information



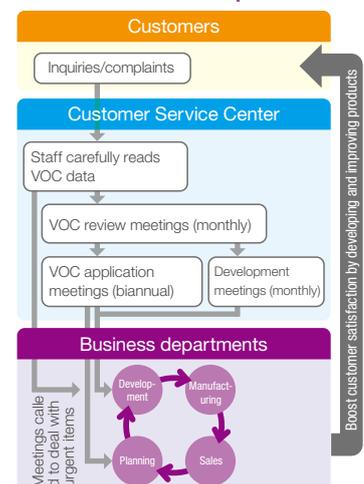
Identification of areas for improvements through customer feedback

The Ajinomoto Group values customer feedback and shares it internally in a timely manner to improve its products and services.

At Ajinomoto Co., Inc., Ajinomoto Frozen Foods Co., Inc., and Ajinomoto AGF, Inc., for instance, all comments and requests are entered into a database on the day they are received and posted the next day on the internal network. Problems deemed urgent are reported immediately to the relevant departments, which investigate the causes and take measures to prevent reoccurrence. The investigation results are reported back to customers and also fed into efforts to detect and resolve quality issues.

Customer service divisions also review all customer feedback each month. Opinions and requests are analyzed from various angles, including customers' dietary challenges and underlying expectations or dissatisfaction toward the products; proposals are then made to relevant divisions. During this process, value is placed on reproducing the problem with actual product samples, which enables unobstructed understanding of the customer's concerns

Ajinomoto Co., Inc.: Incorporating customer inquiries into business processes



and evaluation of the product from their unique perspective.

Additional meetings are held to internally share customer views in connection with the receptivity of new products and product revisions, ongoing inquiries, changes in consumer opinion, habits, and living environment, and customer suggestions. This information is then incorporated into product development and improvement processes.

Column

Products improved based on customer input

Efforts at Ajinomoto do Brasil

Ajinomoto do Brasil Ind. e Com. de Alimentos Ltda. sells an array of products across Brazil, from *AJI-NO-MOTO*® umami seasoning and *Sazón*® flavor seasoning to *VONO*® cup soup and, since 2016, amino acid-fortified foods such as *amino VITAL*® *GOLD*. *Servico aos clientes*, the customer service division of Ajinomoto do Brasil, receives some 21,000 phone calls and 14,000 emails annually regarding customer questions, suggestions, and concerns. In recent years, they have actively worked to strengthen customer relations on social media. Frequent posts about products and recipes on Facebook, for example, have elicited some 161,000 comments.

VOC-inspired product improvement

Cup soup *VONO*® *Cream and Onion Soup*

Products are sometimes revised or flavors added based on these comments. In fiscal 2016, for example, the pouch colors of *VONO*® *Cream and Onion Soup*, a cup soup, were changed in response to observations that some of them made hard to read the texts printed on the back.



Before After

Customer tour of the Limeira Factory of Ajinomoto do Brasil

In fiscal 2016, Ajinomoto do Brasil invited 29 customers, ages 25 to 60, who had submitted valuable input on Facebook the prior year to a factory tour and dialogue at its Limeira Factory. Participants commented that learning about Ajinomoto's history and business policies, including its quality control practices, deepened their trust and allowed them to enjoy the products every day with peace of mind.

A Facebook post about MID Refresco



Customer tour of the Limeira Factory of Ajinomoto do Brasil

VOICE Customer services at Ajinomoto do Brasil

Solange, manager of the 15-member customer service team, states, "We place a high value on listening to customers through various channels, on understanding the diversity of customer lifestyles and changes in society, and on sharing what we learn with the entire company."

The customer service team at Ajinomoto do Brasil (Manager Solange at back row, right)



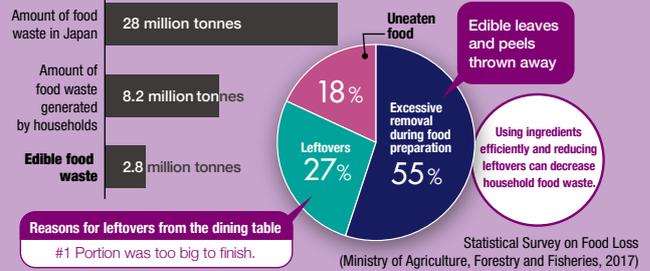
Sustainable Lifestyles, Starting with the Dining Table

As a food manufacturer, the Ajinomoto Group not only has the responsibility to deliver delicious and healthy foods; it also has the opportunity to help people embrace more eco-friendly lifestyles. Serving for a truly healthy ‘dining table,’ good both for families and for the earth—that is what the Ajinomoto Group aims for. The Group will continue to develop eco-friendly products and propose recipes and tips to encourage environmentally responsible living—starting right at the dining table.

DATA

Food losses in Japan

Japan generates about 28 million tonnes of food waste each year. Food waste from households accounts for about 8.2 million tonnes. Of this, about 2.8 million tonnes are said to be edible—leftovers, edible parts of ingredients excessively removed during preparation and cooking, and food simply thrown away. To minimize these food losses in households, it is important to help individuals respect the value of food and enjoy meals enough to finish them.



Promotion of “eco-friendly food life style” through products, recipes and advertising

Raising awareness through unique labeling (*Aji-na Eco* and *Hotto-suru Eco* marks)

Product packages are thrown away by consumers after purchase, and the Ajinomoto Group is taking steps to make this packaging more environmentally friendly. To help consumers to instantly recognize and select eco-friendly products whenever possible, the Group introduced its unique *Aji-na Eco* mark in autumn 2010 and the *Hotto-suru Eco* mark for products of Ajinomoto AGF, Inc. in spring 2015.



Reference

The Environment P112

Promotion of products with original labeling for environmental packaging

Eco-Uma Recipe tips

Everyday cooking is actually a chance to start eco-friendly at home today. This is why Ajinomoto Co., Inc. has launched activities to spread environmentally friendly, delicious and smart *Eco-Uma*^[1] ideas and recipes for everyday cooking.



[1] The Japanese terms for *Aji-na Eco* mark, *Eco-Uma* and *Eco-Uma Recipe* are registered trademarks of Ajinomoto Co., Inc.



Reference

Eco-Uma Recipe (Japanese)

<http://www.ajinomoto.com/jp/activity/environment/eco/ecouma/>

Helpful advertising

The Ajinomoto Group’s helpful advertising offers tips on “eco-friendly food life style”.



“EDO Period, ECO ideas”

Sharing green ideas from the food culture of Japan’s pre-modern Edo period (video clips also available)

Reference

Environmental advertisements (Japanese)

<http://www.ajinomoto.com/jp/activity/environment/eco/environmentalad.html>

Ajinomoto Eco-Friendly Eating KIDS Prize awarded to tomorrow's leaders

Since 2010, Ajinomoto Co., Inc. has awarded the Ajinomoto Eco-Friendly Eating KIDS Prize to youngsters whose entry in the "Green Lane" environmental diary contest^[2] features fun, outstanding environmental activities relating to food.

In the seventh contest, held in fiscal 2016, the prize was awarded to ten youngsters for their environmental activities. Ajinomoto Co., Inc. will continue to support the contest as a way to encourage children, the leaders of tomorrow, to practice environmentally friendly food lifestyles at home.

[2] As part of the contest conducted by Green Cross Japan, approximately 100,000 elementary school students receive guidebooks on ways to address environmental problems and 12-week journals for keeping environmental diaries.



At the fiscal 2016 award ceremony

Reference

The Ajinomoto Eco-Friendly Eating KIDS Prize (Japanese)
<https://www.ajinomoto.com/jp/activity/environment/eco/award.html>

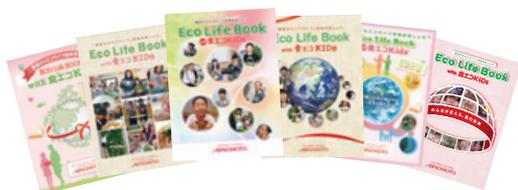
Promotion of environmental food lifestyles at home

In fiscal 2013, Ajinomoto Co., Inc. began visiting elementary and middle schools and events in Japan to provide environmental classes. After a hands-on lesson about dashi and umami using *HON-DASHI*® and *AJI-NO-MOTO*® as teaching aids, the students were introduced to the company's products and environmental initiatives. Using a specially prepared textbook, *Eco Life Book with Eco-Friendly Eating KIDS*, the students enjoyed learning how to try environmentally friendly food lifestyles at home.

The textbook is distributed at Eco-Products exhibitions and other events. It has also been distributed since fiscal 2013 to Green Lane-participating schools that request it, including 8,000 copies in fiscal 2016.

Textbook content along with eco-friendly eating tips and past prize winners are presented on the company's website. In March 2017, a new simple "Eco-Uma Recipes for Eco-Friendly Eating KIDS" page was created.

Eco Life Book with Eco-Friendly Eating KIDS, now in its sixth edition, introduces excerpts from the diaries of Ajinomoto Eco-Friendly Eating KIDS Prize winners as tips for elementary school students starting eco-friendly food lifestyles.



Reference

Eco-Friendly Eating KIDS initiatives (Japanese)
<http://www.ajinomoto.com/jp/activity/environment/eco/>



Diary excerpts from the fiscal 2016 prize winners



Photo-illustrated recipes (some with videos)
 Four simple steps to follow!

Partnership with Kawasaki City and Kao Corporation on sustainability education

Ajinomoto Co., Inc., in partnership with cosmetics manufacturer Kao Corporation and environmental consulting firm E-Square Inc., launched in 2011 the Society for Sustainable Food and Life Styles, an organization tasked with equipping consumers to make environmentally responsible choices in their daily food and living habits through research, awareness raising, and educational programs.

In fiscal 2015, the Society created a new hands-on, environmental education program for children in partnership with Kawasaki City, where both Kao and Ajinomoto have manufacturing plants and which promotes itself as an environmentally progressive city good for the environment and business. The program aims to motivate children to reassess their daily habits with their families and communities through considering their lifestyles and environmental issues. For four days in July and August 2016, the program was held under the title “Summer Challenge: Exploring the Earth's Future through Food and Daily Living.”

The four-day event included plant tours, cooking classes, and a soap experiment, in addition to a workshop where participants reflected global resource recycling after learning about the history of pollution and environmental efforts in their hometown of Kawasaki. Participants were also asked to write in a daily environmental journal to prompt at-home discussion and action on the things they learned.

Comments from children who participated in the month-long program revealed the enjoyment of discovering and practicing eco-friendly solutions in everyday life. One parent commented, “We now talk about these issues more and are working on them together.” In fiscal 2017 the program will be continued in a partially revised format.



Web →
Summer Challenge activity report (Japanese)
<http://begoodcafe.com/news/challenge2016>
<http://begoodcafe.com/news/challenge2017>



Children impressed by the process of hand-sorting waste (Ukishima Waste Treatment Center, Kawasaki City)



A factory presentation on corrugated boxes and other packaging solutions (Kawasaki Plant, Kao Corporation)



Children learn how laundry detergent removes stains in an experiment (Kawasaki Plant, Kao Corporation)



Learning about bonito flake shaving methods and production at the HON-DASHI factory (Kawasaki Factory, Ajinomoto Co., Inc.)



Touring the wastewater treatment facility after learning how treatment works (Kawasaki Factory, Ajinomoto Co., Inc.)



Children try Eco-Uma cooking (Kawasaki Factory, Ajinomoto Co., Inc.)



A lecture on the links between lifestyle habits and the global environment (Kawasaki Eco Gurashi Mirai-kan museum)



Children reflect on what they learned while exploring the connection between the global environment and their lifestyles (Kawasaki City Industrial Promotion Hall)



A completion certificate was awarded to children for four days of immersive study (Kawasaki City Industrial Promotion Hall)

Communication with consumers at the Eco-Products 2016 exhibition

The Eco-Products exhibition is the largest environmental expo in Japan. In 2016, the exhibition was held at Tokyo Big Sight on December 8-10, attracting more than 170,000 visitors over three days.

Five companies of the Ajinomoto Group set up a joint booth introducing the Group's eco-products. The booth also promoted ideas for creating an "eco-friendly food life style" that begins at the dining table. This was a valuable opportunity for employees to talk directly with exhibition visitors and listen to a wide viewpoint of consumers.



Some 160 group employees helped with the exhibition booth.

Forums for envisioning an ideal future

No one entity can build a sustainable future on its own. The Ajinomoto Group recognizes the need to work with all of society to achieve this goal. The Group values opportunities to discuss community members' visions for the future from a variety of perspectives. It is these opportunities that help the Ajinomoto Group discover what it can do to build a healthier future.

As part of this focus, the Ajinomoto Group Sustainability Forum has been held in cooperation with a number of organizations to help create a sustainable future.



Themes of past forums

1st	Mar. 2012	"For the Healthy Future of Life in All Its Diversity"
2nd	Dec. 2012	"Food and Life Create the Future of the Earth—Let's Make Sustainable Lifestyles Together"
3rd	Mar. 2013	"Food and Science for Sustainability"
4th	Jun. 2014	"Promoting Ecological Agriculture in Kyushu—Biomass Link in Saga"
5th	Nov. 2014	"Japanese Nutrition Will Change the World!"
6th	Sep. 2015	"Life, Food, and Amino Acids: What We Can Do in Daily Life"

Reference

Ajinomoto Group Sustainability Forum
<https://www.ajinomoto.com/en/activity/forum/>

Column

Public-private workshop to imagine "food in 2050"

In October 2016, the Ministry of Education, Culture, Sports, Science and Technology held the World Forum on Sport and Culture. As Japan prepares to host a number of international sporting events, the Forum was to be an opportunity to discuss and provide information on how sport, culture, and business could contribute to the world and create legacies both tangible and intangible. Ajinomoto Co., Inc. sponsored a public-private workshop titled "What Does the Future of Food Look Like in 2050?" At the event, Takaaki Nishii, CEO of the company, discussed solutions to make food systems sustainable without losing the value and joy of eating.



Speakers:

Lord John Krebs, Former Principal of Jesus College, University of Oxford; first Chair of the British Food Standards Agency
 Aiko Doden, Senior Commentator & Chief Producer, Japan Broadcasting Corporation
 Yukari Takemi, President, The Japanese Society of Nutrition and Dietetics
 Takaaki Nishii, President & Chief Executive Officer, Ajinomoto Co., Inc.

CEO's message:

The issues of health and nutrition, food resource security, and global environment are interlinked. We tackle these issues head-on in this age when culture and social customs are putting brakes on technological advancement. Food is local; it is rooted in the history of where it comes from. It's very important to value local food cultures. We at the Ajinomoto Group develop products, services, and technologies based on our respect for food cultures of different countries, and hope to contribute to the future of food towards 2050.



Community

Mutual Growth with Local Communities

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- Improved mother-child nutrition to help eradicate poverty
- Vietnam Nutrition System Establishment Project (VINEP)
- AIN program: Nutritional improvement in developing countries
- AIN program case reports

P143 Activities of the Ajinomoto Group's Foundations

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- Thailand
- Peru
- Brazil

P146 Support for Areas Struck by Natural Disaster

- Ajinomoto Group's emergency assistance
- Ajinomoto Group's Red Apron Project to support Tohoku

Related company policies

- **Ajinomoto Group Principles**
<https://www.ajinomoto.com/en/activity/policy/>

- **Ajinomoto Group Nutrition Policy**
https://www.ajinomoto.com/en/activity/policy/nutrition_policy.html

- **Ajinomoto Group Nutrition Strategy Guideline**
https://www.ajinomoto.com/en/activity/policy/nutrition_guideline.html

Fiscal 2016 activity highlights

- Vietnam Nutrition System Establishment Project (VINEP)



→ P139-140

- Support for areas struck by natural disaster



→ P146-148

Resolution of Food and Nutritional Issues Worldwide

The Ajinomoto Group is working to solve issues in the field of food and nutrition in communities and implement a variety of initiatives around the world.

Vietnam School Meal Project

Vietnam and its children are suffering the double burden of malnutrition, with a lack of vital nutrients resulting in more children of stunting and low body weight in rural areas, and an expanding middle-income population in urban areas leading to an increase in overweight or obese children.

In 2012, Ajinomoto Vietnam Co., Ltd. launched its Vietnam School Meal Project, and has subsequently worked with central government ministries, including the Ministry of Education and Training and the Ministry of Health, as well as 63 local governments to provide nutritionally balanced school meals to children nationwide.

The Vietnam School Meal Project aims to support enhancing the quality of school meals and improving the health and nutrition of students. In the first stage, menu books and nutrition-education materials were developed and distributed to primary schools in 4 major cities. A model kitchen was also built in one school in Ho Chi Minh City for other schools to visit and learn how to improve school-meal operation and hygiene management. In the next stage, the nutrition-balanced menu-design software was developed, then the project was expanded nationwide from January 2017 with cooperation of The Ministry of Education and Training, aiming to have 4,061 primary schools with kitchen facilities register and use the software. By the end of March 2017, the software was already in use in 1,022 schools across the country. The project also has close support and co-operation of Vietnam's National Institute of Nutrition (NIN) in term of nutrition consultancy.



Reference

Special Feature1 P23-24

Nutritionally Balanced School Lunches for All Vietnamese Children: Vietnam School Meal Project

Project milestones

- 1 Develop and distribute menu books, nutrition-education materials for primary schools in 4 major cities
- 2 Build a kitchen model in Ho Chi Minh City
- 3 Develop and distribute the nutrition-balanced menu-design software on nationwide scale

Improved mother-child nutrition to help eradicate poverty

Undernutrition in the first 1,000 days from conception to a child's second birthday causes stunting growth, which is not only thought to increase mortality rates among children under five but also to impair the intellectual development of those who survive. In short, undernutrition in infants and toddlers has a long-standing, irreparable impact.

Since 2009, the Ajinomoto Group has been promoting a project in Ghana designed to improve nutrition for weaning babies, to develop, manufacture and retail *KOKO Plus* amino-acid supplements that improve the nutritional balance of complementary foods.

In April 2017, The Ajinomoto Foundation, established by Ajinomoto Co., Inc., was certified as a public interest incorporated foundation. The company intends to transfer management of these initiatives and provide support to The Ajinomoto Foundation, and continuously develop social business and activities through food such as the Ghana Nutrition Improvement Project.



Reference

Special Feature1 P25

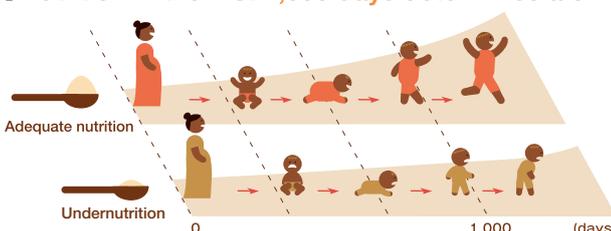
Eradicate Malnutrition, Fight Poverty

Reference

Community P143

Activities of the Ajinomoto Group's Foundations

Nutrition in the first 1,000 days determines a child's growth



In Ghana, about 30% of children aged two years display stunting, mainly from undernutrition during weaning from age six months and beyond.



Koko, Ghana's traditional corn-based porridge used for weaning babies, has inadequate energy, protein, and micronutrients. These nutrients can be supplemented by adding *KOKO Plus*



Vietnam Nutrition System Establishment Project (VINEP)

Proactive collaboration with Vietnamese government in training nutrition experts

In 2009, the Institute for Innovation of Ajinomoto Co., Inc. conducted joint research with Vietnam's National Institute of Nutrition (NIN) into nutrition among Vietnamese people. It revealed an acute lack of nutrition experts in the country, which made the study difficult. There was a need to train people with accurate knowledge of nutrition and hygiene control.

Ajinomoto Co., Inc. lobbied Vietnamese government ministries with the idea of nutrition science education and national certification system for dieticians modeled on the Japanese approach.

In 2010, Vietnam had no national nutrition improvement plans, and no dietary therapies or nutrition counseling took place in healthcare settings. Another issue was a lack of university courses and departments where nutrition was taught.

Ajinomoto Co., Inc. invited key personnel from the Ministry of Health, the Ministry of Education and Training, and medical schools to Japan and introduced higher education in nutrition science and the vital role managerial dieticians played at government and medical facilities. This was the start of the work to build a nutrition training system in Vietnam.

In 2011, the Vietnam Nutrition System Establishment Project (VINEP) was launched to improve the country's nutrition education and framework.

Support for creating places for specialist education in nutrition

In August 2012, Ajinomoto Co., Inc. signed an agreement with Hanoi Medical University and NIN to train dieticians as part of VINEP, and the Nutrition and Dietetics Laboratory course was established at Hanoi Medical University in October 2012 with funding from the Ajinomoto Group.

Following the approval by the Ministry of Education and Training of the country's first dietitian training program in November 2012, Hanoi Medical University opened a four-year nutrition bachelor course in September 2013. The first year saw 47 students enrolled in the course. Since then, around 50 students have joined the course each year.

Ajinomoto Vietnam Co., Ltd. has granted full-year scholarships to around 10 top entrants each year since the opening of the course. Working with Ajinomoto Co., Inc., the company assists in the development of the bachelor program curriculum and course textbooks, as well as giving lectures on nutrition physiology at the professional program.^[1]

In 2014, having received project approval from JICA,^[2] Ajinomoto Co., Inc. invited students from the nutrition bachelor course at Hanoi Medical University to Japan for two weeks of nutrition science training in 2014 and 2015.^[1]

These initiatives culminated in the graduation of 43 bachelors of nutrition from Hanoi Medical University in August 2017, the first in Vietnam, ready to take up posts at hospitals, companies and government bodies.



VINEP nameplate hanging at NIN



Scholarships awarded to third batch students by Ajinomoto Vietnam Co., Ltd.



Nutrition physiology lecture at Hanoi Medical University



Trainees and nutrition-related government officials from Vietnam visiting the Institute for Innovation



Vietnamese trainees taking part in practical training at the Institute for Innovation



The first generation nutrition bachelor students graduated from Hanoi Medical University (August, 2017)

[1] In cooperation with the Japan Dietetic Association (JDA), Jumonji University, and the Kanagawa University of Human Services (KUHS)

[2] Operated by the Japan International Cooperation Agency, this project promotes private-sector technology to facilitate social and economic development in developing countries.

One day home-grown dietitians will thrive in Vietnam

Ajinomoto Co., Inc. has also been working to develop a system through which Vietnam's home-grown dietitians can play a major role in society. Its engagement with the Vietnamese government led to the approval of a regulation specifying the status of dietitians (job code) in October 2015, which came into effect the following month. This enabled dietitians to be employed in the public sector.

To establish a professional standard for dietitians, the Ajinomoto Group also hosted the training of eight Vietnamese nutrition experts in Japan^[3] and VINEP workshops^[4] in Hanoi, Hue and Ho Chi Minh in 2015 under the International Promotion of Japan's Healthcare Technologies and Services initiative^[5] of the Ministry of Health, Labor and Welfare. In 2016, Ajinomoto Co., Inc. also held a 4th VINEP workshop in Phu Yen supporting the Vietnamese Ministry of Health.^[6]

In the future, the Group aims to expand dietitian training schemes at universities and colleges across the country and to establish a framework that facilitates dietitians' work by developing nutrition standards, guidelines and a licensing system.

It is hoped that these initiatives will establish the education and legal frameworks for dietitian training, which will improve the country's nutritional environment and the health of the people.



4th VINEP workshop held in Phu Yen
(Top right) Deputy Minister of Health on stage

Reference

Special Feature 1 P24

Dietician training and qualification systems for sharing of accurate nutritional information

[3] In cooperation with JDA, KUHS, Kyoto Prefectural University (KPU), Kyoto University Hospital, Doshisha Women's College of Liberal Arts, and Kyoto Women's University, among others
 [4] In cooperation with NIN, JDA, KPU, Bach Mai Hospital, Hue University of Medicine and Pharmacy, Ho Chi Minh City Medicine and Pharmacy University, and Ho Chi Minh City Nutrition Center
 [5] This program is funded by "The International Promotion of Japan's Healthcare Technologies and Service in 2015" conducted by the National Center for Global Health and Medicine.
 [6] The Ministry of Health of Vietnam, NIN, JDA and Phu Yen Medical College

Column

Better Nutrition, Stronger Nation Project

In 2010, the Ajinomoto Foundation in Thailand launched a project to build canteens at 50 schools in five years to mark the 50th anniversary of Ajinomoto Co., (Thailand) Ltd.

The project completed 50 school canteens in 43 provinces by 2014 serving more than 10,000 students. In 2015, the project was extended for five years through a basic agreement reached with Thailand's Ministry of Education to support the construction of 50 more school canteens by the end of fiscal 2019. Twenty new canteens serving more than 5,000 students in 18 provinces were completed in fiscal 2015 and 2016.

In addition, nutrition education for teachers and lunch staff was provided in fiscal 2016 at schools where canteens were built. In fiscal 2017 and 2018, the project will be expanded to support the Thailand's Ministry of Education's emergency school support program by building canteens at 20 schools per year and increasing the nutrition education for teachers to six sessions per year.

Results (as of June 2017)

70 school canteens completed in 61 provinces serving more than 15,000 students

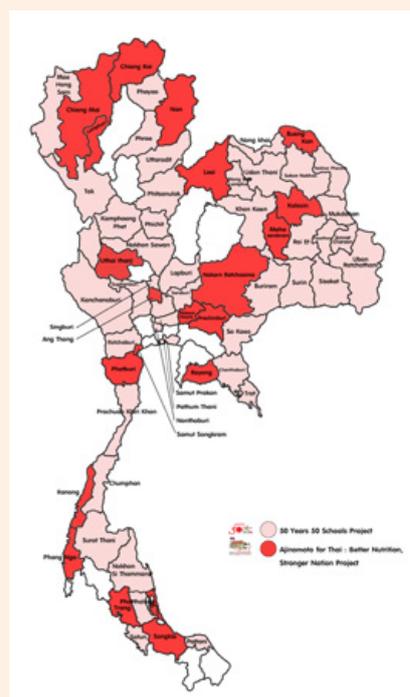


Signing of basic agreement



Nutrition education seminars for teachers

Canteen donations completed so far



AIN program: Nutritional improvement in developing countries

The Ajinomoto International Cooperation Network for Nutrition and Health (AIN program) aims to improve the quality of life of people in developing countries by supporting the local efforts of international collaborations in the field of food and nutrition. From 1999 until 2016, the AIN program provided aid totaling about 300 million yen to NPOs, NGOs and other organizations in 14 countries. The AIN program was transferred to The Ajinomoto Foundation, which was established in August 2016. Obtaining certification as a public interest foundation in April 2017, The Ajinomoto Foundation plans to further expand the reach of its activities.

Improving nutrition is one of the important issues contained in Goal 2 of the UN Sustainable Development Goals (SDGs). Responding to this goal of the international community, the AIN program is promoting projects with high social impact.



Web

What is AIN Program?
<http://www.theajinomotofoundation.org/about/>

Projects in operation in FY2016 or launched in FY2017

FY implemented	Period (in years)	Country	Project name	Implementing organization
2014	3	Malaysia	Improvement of the women's lives in fishing community through food processing (Penang State)	PARC Interpeople's Cooperation
2014	3	Vietnam	Project to support educational activities for mothers to improve the quality of complementary food in rural areas (Hầu Giang Province, Thai Nguyen Province)	International Life Sciences Institute (ILSI)
2014	3	Cambodia	Improvements in nutrition and health by canteen and nutritious training for the ultra poor (Siem Reap Province)	International NGO Kamonohashi Project
2014	3	Bangladesh	Nutrition initiative: Nobo Koli (Fulbaria)	World Vision Japan
2015	2	China	New Efficient Food for Desert—Development & Extension of Mascovy Duck (Alashan, Inner Mongolia)	OISCA Japan
2015	3	Cambodia	Nutrition improvement for families and community development by empowering mothers in the poor areas (Phnom Penh City)	Japan Lay Missionary Movement
2015	3	East Timor	Comprehensive program on nutrition and food for young mothers to improve the health situation of their malnourished children (Iliomar Subdistrict, Lautem District)	Alliance of Friends for Medical-care in East Timor
2016	3	Bangladesh	Child Nutrition Improvement Project in Salt Affected Area in Bangladesh (Bagerhat District, Khulna Division)	Alliance Forum Foundation
2016	3	Bangladesh	Adolescent nutrition and lifelong health promotion project (Jessore District)	Asia Arsenic Network
2016	3	India	Nutrition improvement project of poor village through school lunch (Sujata Village, Gaya District, Bihar State)	Team Peace Challenger
2016	3	Myanmar	Nutrition improvement for children under five years old by promoting vegetable gardening and small-scale livestock farming (Ayeyarwady Region)	CWS Japan
2017	3	Cambodia	Project to provide life skills training to encourage behavior modification for better health and nutrition	International NGO Kamonohashi Project
2017	3	Laos	Project to improve eating habits in rural areas	ISAPH
2017	3	Nepal	YouMe Khaja Project: Enriching the diet in Khotang District, a vast unexplored region of Nepal located 2000 meters above sea level	YouMe Nepal
2017	3	Kenya	Community-based project to foster children's growth and nutrition improvement	HANDS



A child happily undergoing her very first anthropometry in Sujata Village, Gaya, India



Nutrition volunteers gathered at the newly built community house in Bangladesh



Children eating a well-balanced meal in an impoverished district in Cambodia

AIN program case reports

Vietnam

Supporting complementary food preparation of mothers in rural areas

Organization	ILSI Japan, National Institute of Nutrition in Vietnam
Assistance period	April 2014-March 2017
Project site	Ten communes in H�u Giang and Thai Nguyen Provinces, mountainous regions of northern Vietnam
Activities/output	<ol style="list-style-type: none"> 1. Conducted a nutrition and food safety improvement program that, by training more than 300 village health workers, enabled nursing mothers to prepare safe, well-balanced complementary food 2. Instrumental in this work were flip charts and other easy-to-use educational materials created and used with support from the Vietnam National Institute of Nutrition.
Accomplishments (outcome and impact)	<ol style="list-style-type: none"> 1. Reduced stunted growth rate of infants from 6 months to 2 years old from 20.1% to 5.3% 2. Increased the rate of children eating a variety of complementary food from 66% to 85%



Cambodia

Improving nutrition for the ultra poor by factory canteen and training

Organization	International NGO Kamonohashi Project
Assistance period	April 2014-March 2017
Project site	Soutnikum District, Siem Reap Province, Cambodia
Activities/output	<ol style="list-style-type: none"> 1. Provided canteen lunch (587 times to 157 people over three years=totally 92,000 dishes) from over 50 types of recommended model menus based on the three-color food groups 2. Conducted a nutritional knowledge test, resulting in an average high score of 13.5/15 points 3. Developed training methods that use food diaries, menus, etc.
Accomplishments (outcome and impact)	<ol style="list-style-type: none"> 1. Reduced the number of sick days taken by factory-working women from 4.5 to 2.5 days per person per year 2. More than 60% of women showed improvement in the content of home meals and 93% a change in what they consider when deciding home meals 3. Improved "life skills indicator" scores among factory-working women by 25% on average over six-month period (indicator developed by the Kamonohashi Project; results in June and December in last fiscal year of project were compared)



Activities of the Ajinomoto Group's Foundations

The Ajinomoto Group has established foundations in four countries that award scholarships and engage in food and nutrition activities tailored to meet the specific needs of each country and region.

Japan

The Ajinomoto Foundation: Food-related social activities for sustainable nutritional improvements

Improving nutrition is explicitly given as an important issue in the SDGs, adopted as the 2030 goals by the United Nations in 2015. Since corporations alone cannot resolve issues, it is increasingly important to join forces with national and local governments, NPOs, and broader international and regional society to seek cooperative solutions.

Ajinomoto Co., Inc. established The Ajinomoto Foundation to contribute to sustainable nutritional improvement through food. Previously, the company engaged in disaster reconstruction and other social activities in Japan, or helping improve nutrition in low-income nations or regions. These initiatives are transferred to The Ajinomoto Foundation to deepen cooperation with governments and NPOs, and to ensure more sustainable social business and activities through food.

Ajinomoto Co., Inc. will strive to help every member of a global society achieve health and well-being by supporting the foundation, while continuing its efforts to contribute to society through its business.

Sustainable Development Goal (SDGs)

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Web

The Ajinomoto Foundation
<http://www.theajinomotofoundation.org>

Reference

Press Release (April 3, 2017)
https://www.ajinomoto.com/en/presscenter/press/detail/g2017_04_03.html

The Ajinomoto Foundation

(Established in Japan in August 2016 as a general incorporated foundation, incorporated as public interest foundation in April 2017)

The Ajinomoto Foundation's four businesses

Food and nutrition support

(AIN program: support for NPOs improving food and nutrition in developing countries)

Offering financial assistance and consistent support for business promotion to organizations aiming to improve the quality of life of people in developing countries by supporting local initiatives to improve food and nutrition.



Nutritional improvement in low-income countries

(Social business using KOKO Plus nutritional supplements to enhance nutrient-poor weaning foods in Ghana)

Improving maternal and child nutrition in target countries by researching, developing, manufacturing, and retailing nutritional foods tailored to the local market, and broadening nutritional understanding.



Creation of dietician status and system

(Includes working with the Vietnamese government to create a dietician system)

Establishing a system that grants bachelors of nutrition occupational status as dieticians, and assigns them to schools, public health centers, hospitals, large-scale food service facilities, etc. Improving the hygiene and health of citizens in target countries using nutritional education from high-income countries, and developing nutritionally balanced menus.



Disaster reconstruction support

(Includes the Red Apron Project health and nutrition seminars to support Tohoku)

Cooperating with local authorities, social welfare councils, and NPOs to support participatory health and nutrition seminars using mobile kitchen counters, tailored to local needs.



Ajinomoto Foundation for Dietary Culture (Established in Japan in 1989)

Main activities

- Operates the Dietary Culture Library and open exhibits (color woodblock prints, etc.) Digitized 300 cookbooks from the Edo period (1603-1868) in collaboration with the National Institute of Japanese Literature. (Public release in May 2017)
- Holds public symposiums
- Held a joint symposium with the National Institutes for the Humanities on the diversity of washoku or Japanese dietary culture. Active discussions unfolded around its regional diversity and constant evolution over time. (October 15, 2016)
- Held a symposium on humanity's decision to domesticate plants and animals for farming. Looked back on humanity's history of procuring food, while searching for future paths by looking at plant- and animal-related food procurement issues since the modern era. (November 26, 2016)
- Plans and runs food culture forums (interdisciplinary panel discussions on food culture) Based on the annual theme "sweetness culture," provided opportunities to explore from various perspectives the meaning sweet taste has in human dietary culture. (Held three times in June and September 2016, and March 2017)
- Publishes and distributes *vesta*, a quarterly magazine on food culture, and other materials
- Disseminates information through the Internet

Ajinomoto Scholarship Foundation

(Established in Japan in 1957 as Suzuki Scholarship Foundation, name changed in 2005, incorporated as public interest foundation in 2012)

Main activities

- Grants scholarships to students from five ASEAN countries (Indonesia, Malaysia, the Philippines, Thailand, and Vietnam) for a total of three years of study in a master's course (majoring in one of the sciences, including one year as a research student) at the University of Tokyo.
- Provides student loans for Japanese students taking science programs in upper division classes at the undergraduate level or in graduate school.

Web

Ajinomoto Foundation for Dietary Culture (Japanese)
<https://www.syokubunka.or.jp/>



Panel discussion at a joint symposium with the National Institutes for the Humanities

Web

Ajinomoto Scholarship Foundation (Japanese)
<http://ajischolarship.com/>



Together with ASEAN and other international scholarship students at the Ajinomoto Umami Science Square

Thailand

Ajinomoto Foundation (Established in Thailand in 1976)

Main activities

- Implements Better Nutrition, Stronger Nation Project (donations to rural elementary schools to build canteens and nutrition training for teachers)
- Provides scholarships for science, technology and engineering students and students at top universities
- Provides support to people in the colder regions of north and northeast Thailand Provided 2,500 coats and 11,500 blankets to students in two provinces.
- Provides support for construction and refurbishment of district health centers
- Provides support for building educational facilities at a camp for university student volunteers



Assisting in cold areas in the north and northeast of Thailand

Peru

Fundación Ajinomoto para el Desarrollo de la Comunidad (Established in Peru in 2003)

Main activities

- Supports project to prevent anemia and malnutrition
- Trains schoolchildren to become role models and active promoters of healthy food habits at their schools
- Holds health and nutrition workshops and lectures (60 events in fiscal year 2016, with 2,310 participants in total)
- Provides economic support (scholarships) for students majoring in dietetics
- Sponsors the "Ajinomoto Foundation Prize" (a contest to promote bibliographic research among university students)



Nutrition education for school children to become promoters of healthy food habits

Brazil

Instituto Ajinomoto (Established in Brazil in 1999)

Main activities

- Supports a sports organization for children with disabilities
- Implements activities to contribute to the local community (donates school supplies to elementary schools, etc.)
- Subsidizes research on umami and the five basic tastes through the Ajinomoto Institute Research Award
- Holds employee volunteering programs



Supporting the sports organization

TOPICS

AJIBEM volunteering program and Social Game

In 2015, Instituto Ajinomoto launched a volunteering program, called AJIBEM, designed to promote employee involvement and commitment to social causes through volunteering. In AJIBEM, employees organize themselves into groups and perform actions, such as collecting donations and holding events, while involving community members and other volunteers.

A notable example of such actions is Social Game, begun at the start of AJIBEM to build employee enthusiasm for volunteering. The activity uses friendly competition to encourage groups to press their boundaries and broaden their volunteering efforts beyond chosen themes.

In fiscal 2016, the second year of holding Social Game, 132 volunteers composing 11 teams participated, with each team volunteering in three themes.

Though the program is still young, the value of its mission is catching on. Employees have reported feeling a sense of meaning from seeing the impact of their actions, and some teams have continued their volunteering activities even after completion of the program's yearly schedule.



Volunteer at recycling workshop with children



Donation of food and hygiene products

Fiscal 2016 activities in numbers

- 1 Donation of school supplies
Distributed more than 8,500 items such as pens and notebooks to more than 5,000 children.
- 2 Donation of food and hygiene products
Distributed more than 4 tonnes of food and 20,000 personal hygiene products to more than 10,000 people.
- 3 Educational events on nutrition, health, and umami
Approximately 1,000 volunteers held 37 events attended by some 25,000 people.

Support for Areas Struck by Natural Disaster

Natural disasters are a tragic part of life in every part of the world, and local communities damaged in disasters need help with reconstruction. The Ajinomoto Group uses the expertise gained through its food and healthcare businesses to provide support for each area's particular needs.

Ajinomoto Group's emergency assistance

Disasters in Japan (activities until end of August 2017)

Event	Recipient	Aid amount	Relief goods	Quantity
2016 Kumamoto earthquakes	Japan Platform	20 million yen	-	-
	2016 Kumamoto Earthquake Disaster Donation, Japanese Red Cross Society	4 million yen	-	-
	Ministry of Agriculture, Forestry and Fisheries	-	Ajinomoto KK Okayu (shirogayu, ume)	54,000 packs
		-	amino VITAL® Jelly Multi-energy	30,240 packs
		-	AQUASOLITA® 500 ml	12,000 bottles
	Kumamoto City Hall	-	Ajinomoto KK Okayu (shirogayu, ume, tamago)	4,860 packs
		-	amino VITAL® Jelly Multi-energy	6,000 packs
-		Blendy® bottled coffee low-sugar 900 ml	12,000 bottles	
2017 Northern Kyushu flood	Japan Ground Self-Defense Force, Kumamoto Fire Department, Kumamoto Prefectural Police	-	amino VITAL® Jelly Multi-energy	15,000 packs
	Japan Platform	5 million yen	-	-
	Japan Voluntary Organizations Active in Disaster	-	AQUASOLITA® 500ml	2,400 bottles

Column

Ongoing support of disaster-hit areas based on local needs

At the 2nd "Tsunagaru Hiroba" event held in Mashiki, Kumamoto Prefecture, on April 2, 2017, Ajinomoto Co., Inc. Kyushu Branch served gyoza soup made with Marudori Gara Soup® to 557 people attended the event.

The event was organized by Yokatainet to give displaced people living in "deemed temporary housing"^[1] across the prefecture a place to socialize as well as living support. The Kyushu Branch used its know-how of organizing fan activities across Kyushu, to cook gyoza soup using Marudori Gara Soup® and locally grown vegetables.

Easy-to-cook recipes

People living in temporary housing find cooking in unfamiliar makeshift kitchens off-putting. Upon hearing their voices, in fiscal 2016, Ajinomoto Co., Inc. prepared a booklet of five easy-to-cook recipes that can be made in a confined space, and distributed it to around 5,700 households in Kumamoto Prefecture.

[1] "Deemed temporary housing" units are rented by the local authority, and disaster victims placed in them are harder to identify. Providing support to these people is a key challenge in Kumamoto Earthquake relief efforts.



Ajinomoto Co., Inc. staff at the event

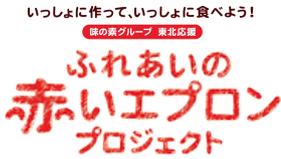


Marudori Gara Soup® with gyoza



Easy-to-cook recipes

Ajinomoto Group's Red Apron Project to support Tohoku



Since October 2011, the Red Apron Project is Ajinomoto Group's ongoing initiative to support reconstruction after the Great East Japan Earthquake occurred in March 2011. Cooking classes held at temporary housing assembly halls and other activities are conducted in the three prefectures of Iwate, Miyagi and Fukushima, in collaboration with local governments, social welfare councils, diet improvement promotion councils, NPOs, universities, and temporary housing community councils.

Project beginnings

In July 2011, Ajinomoto Co., Inc. appointed a dedicated project supervisor to work in the disaster-stricken areas. The region's food and nutrition issues were brought out by interviews with officials from local governments, social welfare councils, universities, and NPOs, among others. One issue was the emerging health problems caused by imbalanced diets, which was partially due to people tending to cook less in the temporary housing's small kitchens. In the new communities formed by the temporary housing, social interactions between residents were also weak, and many of the elderly tended to feel isolated and withdraw from others.

The Ajinomoto Group devised a plan to help with the local resident's nutritional problems, as well as help build new communities, by "cooking together and eating together" well-balanced meals.

Mobile cooking classes started in October 2011 organized by the local governments, social welfare councils, diet improvement promotion councils, NPOs, universities, and temporary housing community councils, with the Group providing expertise such as nutritious recipes, the mobile kitchen, and other equipment.



Partner-led collaborative activities

1 Make cooking groups participatory

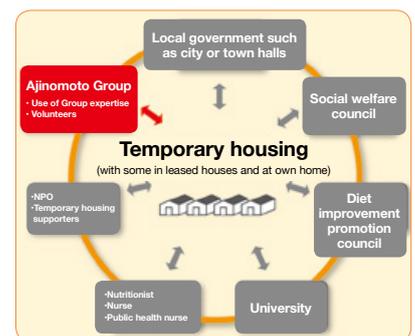
One aim of this project is to connect participants through cooking to help rebuild communities. The experience of cooking together is just as important as eating together in deepening relationships. And for the Tohoku region where salt intake is high, low salt menus are provided to aid in maintaining health.

2 Make collaborative partners the organizers of the cooking class

This strategy was taken so that by providing the gathering place and guiding people, the people helping with the community's social problems, such as local governments, NPOs, social welfare councils, diet improvement promotion councils, and temporary housing community councils, form stronger bonds with the local people. In contrast, with a single corporate organizer, the initiative may turn into a one-off event that is difficult to sustain. These people helping with the community's social problems are designated as "collaborative partners."

3 Make collaborative partners decide on the theme of the cooking class

The themes of the cooking classes in the project vary according to each area's challenges. If social withdrawal of men is a serious issue, for example, then a cooking class for men is held. The collaborative partners decide on such themes, since they know more than anybody else the issues facing each area and can carry out the activities in consultation with the community.



Relationship with collaborative partners



Project achievements

① Human connections

Through this project, the Ajinomoto Group was able to meet the people in social welfare councils and diet improvement promotion councils. These people have been working closely with the community on social and nutritional issues since before the earthquake. By meeting them through the project, the Group has learned about the social issues in each community and what the Group can do to help with these issues.

One of the lessons learned is that corporate contribution to society does not necessarily have to be money or goods. Rather, corporations need to consider the social issues at the community level from such people's perspective, before suggesting solutions that leverage the core business and expertise of the company.

For Ajinomoto Group, this translates to food and nutrition, which led to the proposal of a mobile cooking class—the heart of this project.

② Learning opportunity for employees

For Group employees donating their time as volunteers, supporting the affected areas through food and nutrition is a source of renewed pride as a member of the Ajinomoto Group.

Many of those who volunteered said that they experienced first-hand how food is the basis of life. Researchers, finance department staff and other employees who usually do not have the chance to interact with consumers also said, "Hearing words of gratitude from the people in affected areas made me think about my own purpose as a member of a food company."

The project is a great opportunity for employees to experience Ajinomoto Group's mission to "contribute to the world's food and wellness, and to better lives for the future."

③ Sharing expertise by publishing book

The project published a book titled "Fukko-Gohan (food during the reconstruction period)" in May 2016 through SHOGAKUKAN Inc. The book conveys the restorative "power of food" in this period of recovery from the disaster, through the voices of people in Tohoku who worked together with the Group as collaborative partners.

Outlook for the future

The Ajinomoto group has declared its intention to continue the project until the temporary housings are gone and the path to recovery is clear.

Now that reconstruction is slowly moving forward, people in Tohoku are moving from temporary housing to public housing for disaster-affected people. Again, issues regarding relationships between people in the new communities are starting to emerge.

Once more, the project is proposing to face this issue by "cooking together and eating together" through mobile cooking classes.

Control of the Red Apron Project transferred to The Ajinomoto Foundation in April 2017

Scope of activities

Total participants

37,485

Events conducted

2,452

Places conducted

47 municipalities in 3 prefectures

Partners in the local community

Together with around 300 people

Employees donating their own time

2,219

(Note) Accumulated total since October 2011 (as of March 31, 2017)

Ajinomoto Group's initiatives for 2011 Tohoku earthquake reconstruction

食卓からニッポンを元気に



"Joy of Food" project

Ajinomoto Co., Inc. have been implementing the "Joy of Food" project since fiscal 2011, which gives customers the opportunity to support reconstruction in Tohoku by purchasing food products.

東北に元気を!
明日を耕すプロジェクト

Go Tohoku! Cultivate for Tomorrow Project

Since fiscal 2011, Ajinomoto Frozen Foods Co., Inc. has been conducting a project that donates one yen from the sale of each package of frozen Gyoza Chinese dumplings (four varieties) to organizations assisting agricultural revitalization in the Tohoku region.

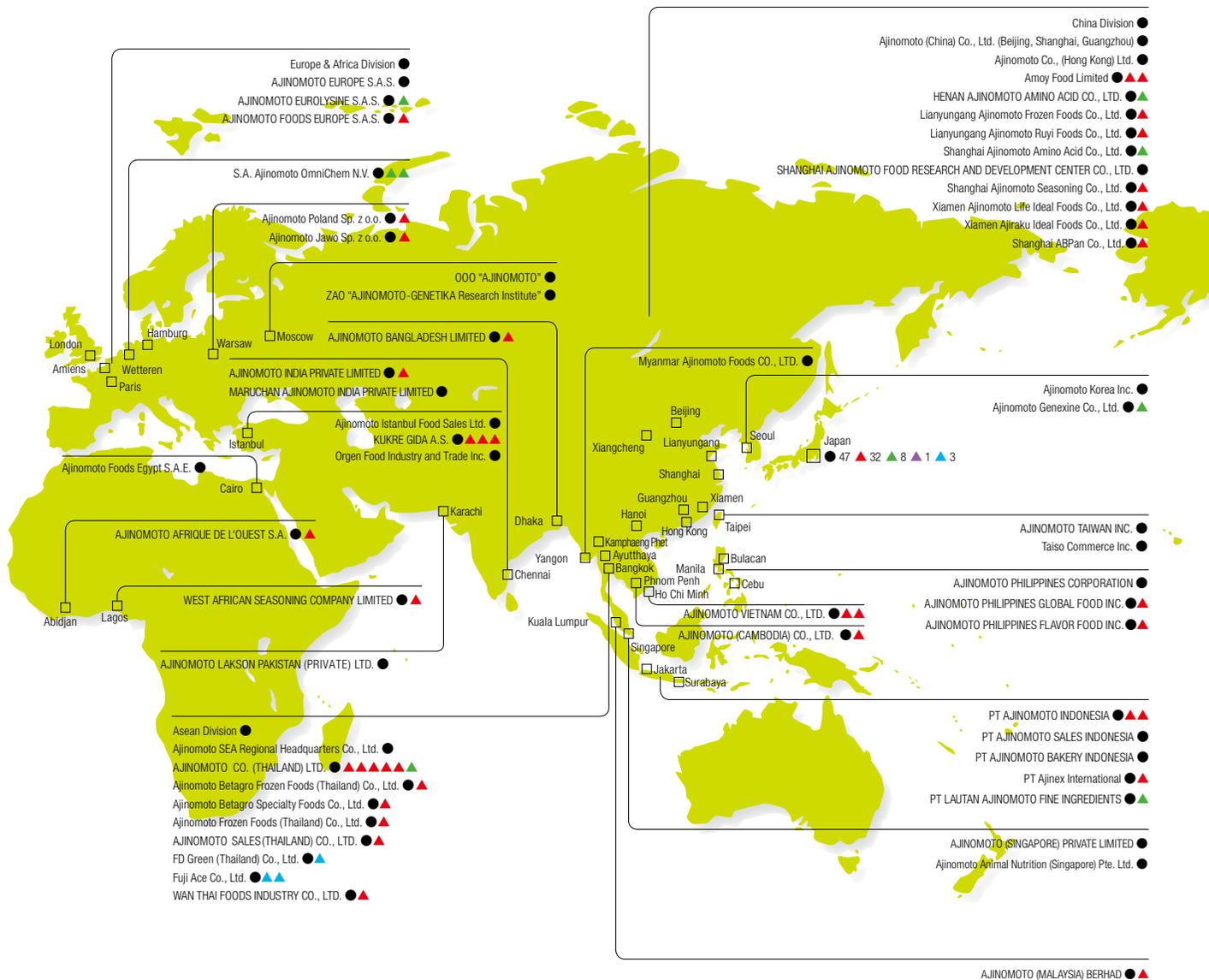


AGF Blendy® Utsuwa no Kizuna Project

Ajinomoto AGF, Inc. donated a portion of the proceeds from sales of Blendy® instant coffee to assist the pottery industry in Tohoku with needed repairs. Since its launch in 2012, the focus of the project has shifted in 2014 from repairs into efforts aimed at reviving the pottery industry in Tohoku.

Global Network (As of April 1, 2017)

The Ajinomoto Group is globally expanding in a wide range of business fields, with operations spanning 30 countries and regions.



Global network: 30 countries and regions
(including 118 manufacturing and packaging factories in 22 countries and regions)
(Japan: 44; Other Countries: 74)

- Subsidiaries, Affiliates and Offices of Ajinomoto Co., Inc. (86)
- ▲ Foods Factories (86)
- ▲ Amino Acids and Specialty Chemical Factories (24)
- ▲ Pharmaceuticals Factories (1)
- ▲ Other Factories (7)

Divisions are regional headquarters.

Note : 1 Factories include packaging factories.
2 Not all factories are displayed on the map.

Global Review

The Ajinomoto Group Sustainability Data Book 2017 has been reviewed by representatives of important stakeholder groups in the Americas, Europe, and Asia, and Japan. The Ajinomoto Group will use their input to help shape its future sustainability initiatives.

Perspective from Europe

The Ajinomoto Promise

It is always a pleasure to review Ajinomoto's annual sustainability disclosure, as I have done for the past few years. There is so much richness and depth in this company's approach to sustainable business and positive impact on society and the environment. And, consistency. While continuing to adapt and update the sustainability approach for current relevance, Ajinomoto maintains a consistent structure and framework for advancing sustainability strategy and actions. This is the Ajinomoto promise. As I delve into the Sustainability Data Book, I know I will find strong, relevant, transparent and fascinating content that represents both the continuation of a journey and also an adaptation to new current realities.

This Data Book for 2017 is no different. The Mission, Vision and three-pillar focus of Ajinomoto Shared Value (ASV) - Global Sustainability, Food Resources and Health and Well-being - remain anchors of the company's approach. However, the revision and adaptation to the Sustainable Development Goals of the Materiality Matrix, the introduction of a Nutrition Policy and FY2020 targets, and significantly, a section merging sustainability and financial objectives into one coherent way forward are new inclusions in this 2017 data book representing the future promise of this exciting company.

Materiality, Stakeholders, Targets and Integrated Reporting

Ajinomoto's revised materiality matrix, in addition to changing the priority of some topics, adds three new topics: eating together, sustainable consumption and reduction of environmental impact from packaging as well as splitting out employee-related topics of diversity and capacity development. This is highly positive for several reasons. (1) The matrix review was completed with consultation of stakeholders including a survey of 56 external experts. The outcomes are transparently disclosed and several expert perspectives are included. This validates the materiality review and adds credibility. (2) The new issues primarily reflect Ajinomoto's impact on society, demonstrating a true commitment to adding social value. Eating together, for example, is an important return to social values that have been somewhat left behind in the instant, digital, stressed and often impersonal world we find ourselves living in. For a food company to aim to reshape consumer habits relating to food and adding social benefit is, I believe, the mature essence of creating shared value and driving positive impact. (3) The new matrix is more comprehensive than the previous one. This shows an increasing appetite for creating social value and a willingness to publicly declare a promise in a very broad range of issue areas.

Another addition in this report is indisputably leading edge. Reporting non-financial and financial targets side-by-side is a product of integrated thinking and a reflection of the overall impacts of the business for all stakeholders. The quantified non-financial objectives for FY2020 in themselves are impressive: a target of influencing 22 million people toward a comfortable lifestyle or creating spare time for people worth a total of 38 million hours per year or creating 70 occasions per

Elaine Cohen

Elaine Cohen is a CSR Consultant and Sustainability Reporting Expert, Author, Blogger and Speaker. For more info about Elaine, see: www.b-yond.biz



household per year for eating together, all put the amazing scale and scope of Ajinomoto's impact into perspective and show the actions of a responsible corporation can truly change the way society operates. All these objectives, of course, have operational implications and these are reflected in the corresponding business and financial targets. This makes so much sense, and is one of the best examples of "integrated thinking" I have seen. I hope Ajinomoto achieves these multi-year objectives as they promise to make a genuine difference.

The Difference in the Reporting Year

The 2017 Sustainability Data Book is a very detailed document of 150 pages. It includes three special features on health, environment and governance and detailed reporting and data tables on almost every aspect of Ajinomoto's sustainability impacts. In each major section, a few highlights are noted at the beginning. However, one needs a lot of time (and patience) to work through such a long document, and while Ajinomoto's transparency is commendable, I believe there is an opportunity to consider the effectiveness of this approach. First, a short summary of actual changes and impacts during the reporting year at the beginning of the report could be very useful as an overview of the difference Ajinomoto specifically made in FY2017. Users could then navigate to their areas of interest as they choose. Second, Ajinomoto could clean up all old content. There are several texts which are repeats from prior years and not necessary in this annual report. They make the report too long and dilute focus and clarity. If no significant progress was made in the reporting year against ongoing programs or underlying policies, it is not necessary to repeat them. Third, a reference to external reporting frameworks could help users navigate this report. Although there is a loose correlation to the Sustainable Development Goals, in addition, the GRI Standards, CDP reporting, the UN Guiding Principles on Business and Human Rights or other framework could all help users to understand how Ajinomoto's significant efforts align with global best practice in sustainability actions and reporting. The absence of such frameworks challenges the user to gain a comparative perspective about Ajinomoto's contribution.

Delivering the Promise

Having followed Ajinomoto's progress for several years, I am confident that this outstanding company will deliver on its sustainability promise. In 2017, I sense an enhanced maturity of approach and a strengthening of social value. With a little more focus in disclosure and ongoing investment, innovation and passion, the Ajinomoto sustainability promise is surely one we can rely upon.

Perspective from the Americas

It's a pleasure and an honor to be asked to review the 2017 Ajinomoto Group Sustainability Report after having reviewed progress for several years. Sustainability is a journey and Ajinomoto is reaching new milestones on its path towards sustainability. The company is to be commended for using the UN's Sustainable Development Goals as part of its strategy setting and reporting. This commentary describes Ajinomoto's progress and also examines opportunities and concerns.

Positive developments delivered

Human Rights: Ajinomoto is to be commended for working in alignment with the UN Guidelines for Business and Human Rights to identify potential risks in its value chain. This kind of due diligence is an important process for companies to undertake.

The creation of a Human Rights Advisory Committee is a positive step, as is the inclusion of strategic functions in this group. This Committee should be expanded to address issues outside of Japan.

Ajinomoto Group Nutrition Policy: In 2017, Ajinomoto adopted a Group Nutrition Policy. This provides an overview which has been missing in the past with a vision for the company.

Environment: Ajinomoto sets important long-term goals for 2050 in this report, including cutting food loss by 50 percent within the product life cycle to become carbon neutral. The company promises to use 100 percent certified sourcing by 2020.

Responsible Consumption and Food Loss: The company has taken three important steps to reduce food loss, including changing its best-by labels, using enzyme technology, and using the Aji-na eco-mark.

Social Business: Ajinomoto's Ghana Nutrition Project continues to combat malnutrition and make an important contribution. It is a positive development that there was a dialogue between CEO Takaaki Nishii and Dr. Mohammed Yunus who supports the growth of this "social business". Like Dr. Yunus, I hope to see the Ghana Nutrition Project expand.

Collaboration with UC Davis: Ajinomoto is collaborating in research with the California Dairy Research Foundation to reduce greenhouse gas emissions (GHGs) from the dairy sector. These kinds of multi-stakeholder efforts are helpful to create industry-wide solutions. This will help California reduce its GHG emissions by 15 percent by 2020, meeting the state's goal and assisting the industry.

Sustainable Logistics: Ajinomoto is to be commended for working with other food companies to create greater efficiencies in the logistics sector in Japan including sharing distribution centers and truck drivers. This has allowed for a reduction of GHG emissions of 15 percent and reduction of 18 percent in the number of trucks used per day.

Positive developments promised

The report makes a number of important commitments:

Employee Well Being: Ajinomoto has pledged to hire of a Global Chief Health Officer and country CHOs. This is a significant commitment to employee well-being as is the creation of the Ajinomoto Academy. The company also pledges to address LGBTQ inclusion issues.

Targets Set: The report sets targets for female managers and local hires for 2020. This is an important step towards greater inclusion.

Opportunities

Ajinomoto has joined a number of international initiatives to promote sustainability, including the Roundtable on Sustainable Palm Oil and the FSC. While this is a good start, Ajinomoto needs to show greater leadership in order to meet its goal of becoming one of the top ten

Deborah Leipziger

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food companies in the world. I recommend that Ajinomoto join the Good Growth Partnership which was launched last month to address commodities such as palm oil, beef, and soy. The Partnership is coordinated by the UN Development Program, WWF, UN Environment, and others. Ajinomoto has the capacity to make a significant difference in this important global initiative.

Concerns

Environment: Carbon emissions have increased for all major regions except Latin America and China. Is this increase due to an expansion of production? More analysis is needed to place this into context.

Human Rights in the Supply Chain: The company should strengthen the language of the Supplier CSR Guidelines to ensure greater enrollment: "Suppliers are *requested to respect* the human rights of all employees based on a genuine understanding of the international community, to treat employees with dignity, and to provide a safe and comfortable work environment."

Health Risks Associated with Ingredients: Is there an attempt to reduce the use of palm oil as an ingredient? Is it healthy? Likewise the use of MSG is also controversial.

Migrants: Ajinomoto needs to create a framework to address issues related to global migration and refugees. While the report referenced a workshop attended with stakeholders about migrants in Thailand, more work needs to be done on this global issue.

Child Care and Nursing Care: The report aims at the "enhancement of support for child care and nursing care." What does this mean in terms of resources and indicators?

Integrated Targets for 2020: The use of integrated targets in the report which combine social and financial value adds depth to the report. However, the integrated targets remain a bit vague and would benefit from greater clarification.

Global Reporting Initiative (GRI): Ajinomoto should work to report according to the GRI Guidelines and include a summary which aligns with the GRI framework.

CDP: In order to promote greater transparency and accountability, Ajinomoto should continue to report on its CDP ratings on greenhouse gas emissions. This is important for comparability and transparency. Disclosure on water usage through the CDP is also necessary.

Conclusion

For the past four years, Ajinomoto has made progress towards meeting its sustainability goals and targets. Part of the reason for its achievement is that the company is working with other partners – both public and private – to meet its goals. I look forward to seeing how Ajinomoto can continue to expand its leadership on the global stage to promote sustainability.

Perspective from Asia

This review evaluates the sustainability initiatives undertaken by Ajinomoto Group (hereafter referred to as “the Group”) from an Asian perspective.

Overall Impressions

The reviewer is honoured to be entrusted to review Ajinomoto Group (hereafter referred to as “the Group”) Sustainability Report / Sustainability Data Book Group (hereafter referred to as “the Book”) since 2013. Over the years, the progress is clearly witnessed.

This year, besides continuing layout since 2014, i.e. projecting the main sustainability framework, highlighting three special features and reporting according to seven core subjects of ISO26000, the most encouraging progress noticed is more activities in a variety of countries being highlighted. To name a few, Ajinomoto Foundation is being set up in Thailand, Peru and Brazil other than Japan. Moreover, the Group’s website on Quality Assurance has further added the Vietnamese and Indonesian language and will be adding languages such as the Portuguese, in addition to the Japanese, English and Thai. Furthermore, overseas subsidiaries such as in Brazil, Thailand, Indonesia and Vietnam too have already established their customer call centers. This shows the group’s seriousness towards becoming a “Genuine Global Specialty Company” and one of the top ten global food companies by 2020. The other highly regarded point is the disclosure of non-positive information, including workers’ accidents and cases of legal violations or accidents related to environment.

On the other hand, over 148 pages of the Book, there were also many repetitive points, especially Special Feature cases are being elaborated again under its core subject in ISO26000. The clear examples are Vietnam School Meal Project and skipjack study.

Summary of the positive sustainability initiatives undertaken by Ajinomoto Group

Materiality: It is a very encouraging move that the Group reviewed the materiality items in 2017 and had some major revisions including to re-examining the relative importance of individual items, incorporating additional items to reflect the new social trends, as well as introducing new terms and expressions.

Long-Term Environmental Vision: This is a courageous move which was not explicitly articulated in 2016 Book. The vision which includes 100% sustainable procurement by Fiscal 2020 is especially highly regarded in light of the fact that the possibilities for procuring sustainable palm oil is a challenging issue too but the Group shows its commitment in taking the lead.

Effort to reduce food loss: In view that Japanese consumers is one of the most demanding in the world and best-before date is always an issue in food retailing, it is highly regarded that the Headquarters has been working since 2011 to convert best-before date label to month-year, extending best-before dates to reduce food loss.

Corporate Governance: Framework and structure, as well as detailed description of the Group Corporate Governance is highly regarded. This is because in many Asian countries including even those in developing stage, more attention

Dr. Wong Lai Yong

Dr. Wong Lai Yong, a seasoned CSR consultant, leverages her in-depth knowledge in multinational business operations, hands-on expertise in global and social issues, and fluency in five languages to advise corporations and educational institutions on effective CSR operations across Asia. Dr. Wong



also founded her own social enterprise First Penguin that runs innovative educational programs to promote socially responsible capacity development. She is active in local and cross-Asian community development initiatives, including Universiti Sains Malaysia’s Industry-Community Engagement Advisor and CSR advisor for Advertising Nagata Co., Ltd. She is also appointed as Organizing Committee by Penang Green Council for the setting up of an Environmental Education Facility in the state. Dr. Wong holds a Ph.D in Business Administration from Yokohama National University and a MBA from Keio University. She was selected by Cabinet Office (Japan) as one of the “Shining Women in Asia Pacific Region” in 2016.

is being placed on corporate governance by stakeholders following the global trend. There is an increasing emphasis by *Governing and Statutory Bodies* to tighten their rules & regulations on Corporate Governance to the public listed corporations too.

Ajinomoto Group Principles (AGP): It is highly regarded that the AGP was redefined as actions that all employees across the Group should understand and practice daily, instead of remaining as a comprehensive framework published without much practical value. Moreover, Ajinomoto Group Basic Purchasing as the basic policy for purchasing under AGP makes Purchasing Policy, which generally prevails in any big corporation, stands out as more visionary. This initiative clearly projects that the Group is serious in becoming a “Genuine Global Specialty Company”.

Overseas sites Environmental Achievements: It is very encouraging that overseas business sites, including those in Brazil, Hong Kong and Vietnam received the Internal Environmental Award as excellent business sites, other than Japan. It shows that the Group’s Environmental Regulations is being put into practice even in overseas sites. In addition, the installation of biomass boilers to produce renewable energy at factories in Thailand, Vietnam and Brazil is very encouraging too, despite the group’s per unit emissions in fiscal 2016 remained unchanged from the previous year.

Strategic and High Impact Community Project: School lunch project in Vietnam is highly intact with one of the three material issues facing 21st-Century human society committed by the Group – Health and well-being. From the elaboration of the project, it shows the impact made to the nation through its stage by stage progress over the years, embedded the advanced knowledge and common trends in the home country.

Balancing Economic & Environmental Value: While reducing environmental impact utilizing the Group’s well accumulated knowledge and technology, it also reaps the economic fruit of commercialization feed using amino acids, Charcoal Soil Amendment etc. This serves as a best practice model for most Asian corporations whereby Corporate Social Responsibility

(CSR) is generally still regarded as donation or sponsorship while the term “Sustainability” is rarely touched except for highly environmental-impact industries such as oil & gas and plantation.

Room for Improvement Recommended

Diversity: It is obvious that the external stakeholders contributed for feedback on materiality featured in the Book are all based in Japan. While it is understandable as the Book was compiled in Japan and the original language written is in Japanese but since the Group is aiming to be a genuine global company and the readers (stakeholders) can be from any parts of the world, including voices of external stakeholders other than Japan is highly recommended. This can be easily started by featuring the voices of the NGOs that the Group is collaborating in different parts of the world. Also, it is also recommended that the original region of the 56 experts contributed to the survey of material issue (p.8) being highlighted to reflect the effort to achieve diversity attempted by the Group (as the reviewer had also contributed to the survey, it means the survey is not only contributed by experts based in Japan).

Group Wide Corporate Governance and Increasing Compliance

Awareness Initiatives to Employees: Impression gathered from the report is Corporate Governance and compliance initiatives, including compliance education, HOTLINE, questionnaire on AGP Awareness and thorough information security are mostly concentrated in Japan for the Headquarters & its Japanese group companies. In view that the Group is having operations in many countries still in their developing stage, it will be encouraging to read in the subsequent Books in the years to come on initiatives in raising awareness of corporate governance and compliance to its employees in those countries. The book will attract even more overseas readers' attention if there are posters, data or descriptions on compliance training sessions other than Japan being featured.

Framework for Global CSR Activities: From the framework, it is clearly depicted that “Overseas regional headquarters” are under “Global Communications Dept. CSR Group” in its reporting line. As the Group is serious in becoming a “Genuine Global Specialty Company”, the reviewer suggests more across Group (including overseas subsidiaries) organizations, policies / guidelines and trainings pertaining to CSR, e.g. Social Contributions Policy (in Asian developing countries, it is still prevalent in the society that CSR equals to donations / sponsorships by big corporations to charity projects) being disclosed in the Book.

Prevention of Corruption: Although it is a welcoming move by the Group to reinforce its stance on bribery by issuing a separate Ajinomoto Group Bribery Prevention Policy, it is highly suggested that regular trainings such as in Japan are being conducted in high risks countries as well. If this has been carried out, disclosure of this information is highly recommended. This is because it is still a social norm in many Asian developing countries that “corruption is an economic lubricant”.

Human Rights: It is highly regarded that the Group takes continuous initiatives to have dialogue with stakeholders on human rights issues. However, the actions taken based on the insights gained from the dialogue, if featured, might interest Asian readers more because human rights issue is an increasingly prevalent and unresolved issue which is gaining more attention in many Asian developing countries.

Eat Well, Live Well.
AJINOMOTO[®]



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