

Eat Well, Live Well.



IR Day 2021

Sustainability Initiatives

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Communications

September 29, 2021

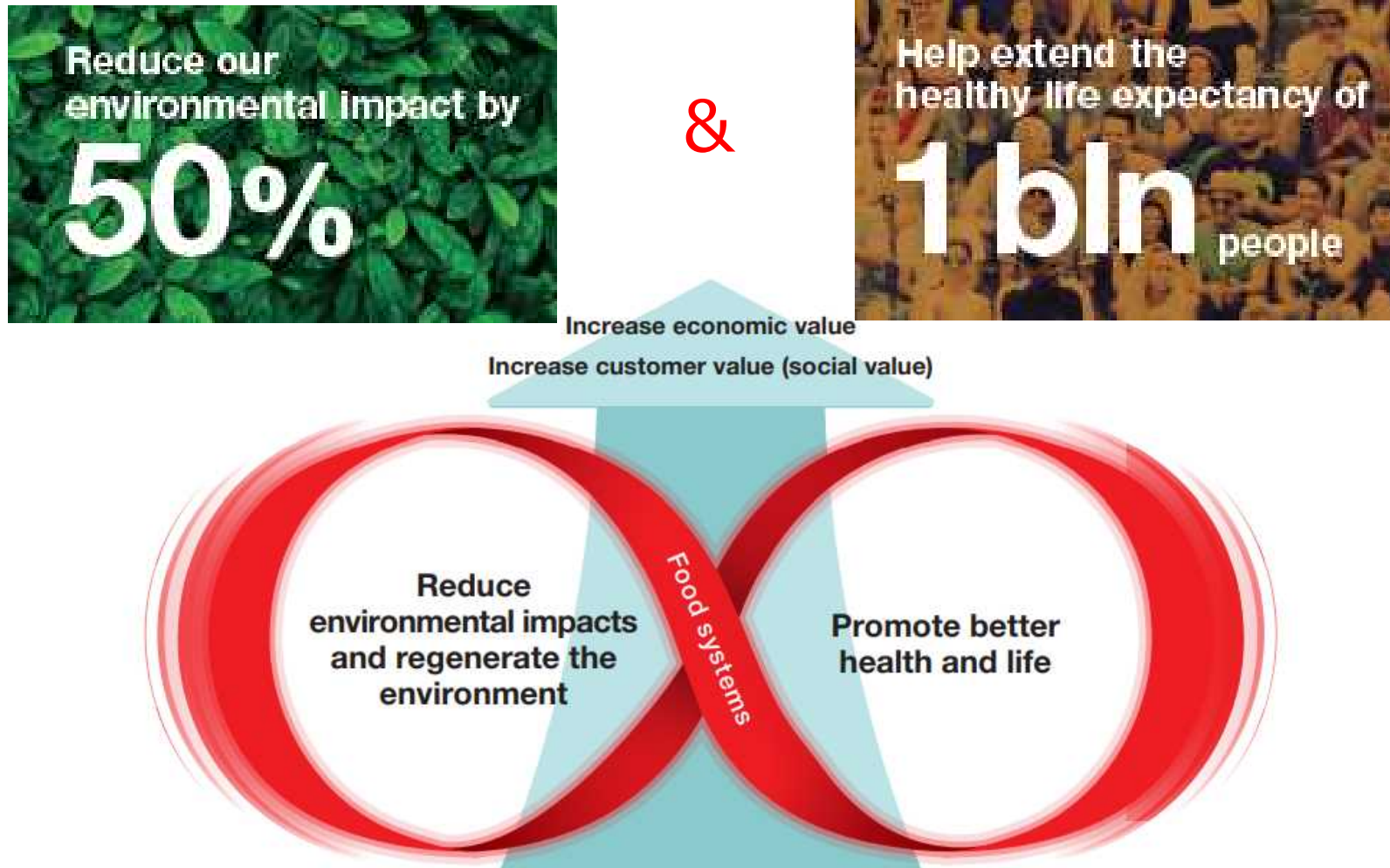
Content for Today

1. Vision & Strategy of the Ajinomoto Group
2. Initiatives to Extend Healthy Life Expectancy of 1 Billion People
3. Initiatives to Reduce Environmental Impact by 50%
4. Toward Regeneration of the Environment; Sustainable Food Systems; and Eat Well, Live Well

1. Vision & Strategy of the Ajinomoto Group

Ajinomoto Group Vision

Contribute to greater wellness for people worldwide, unlocking the power of amino acids to resolve the food and health issues associated with dietary habits and aging.

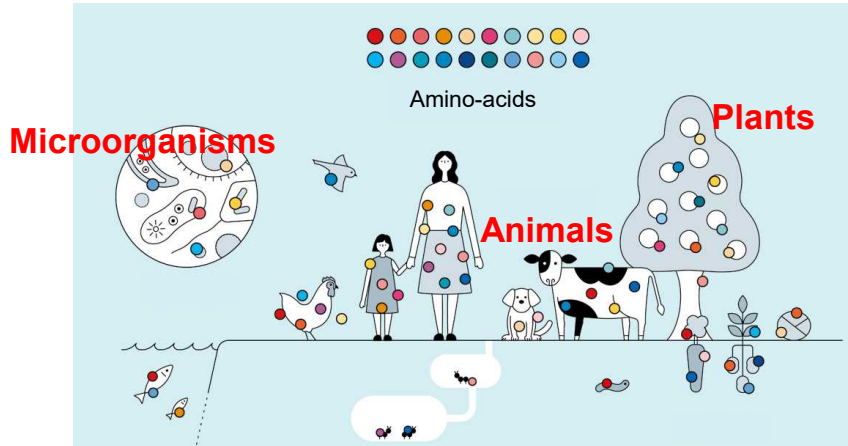




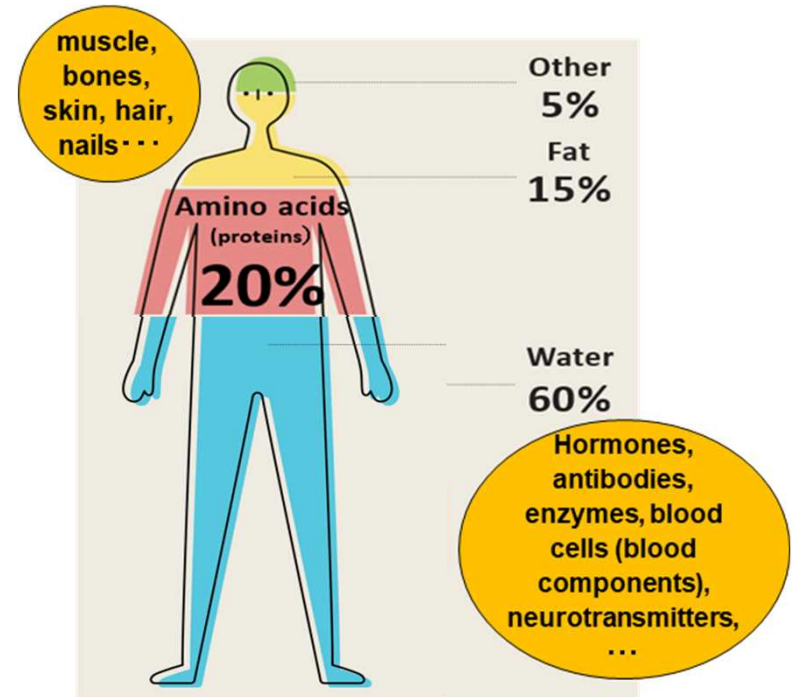
Continuing to Refine “Action of Amino Acids” as Our Core Competency

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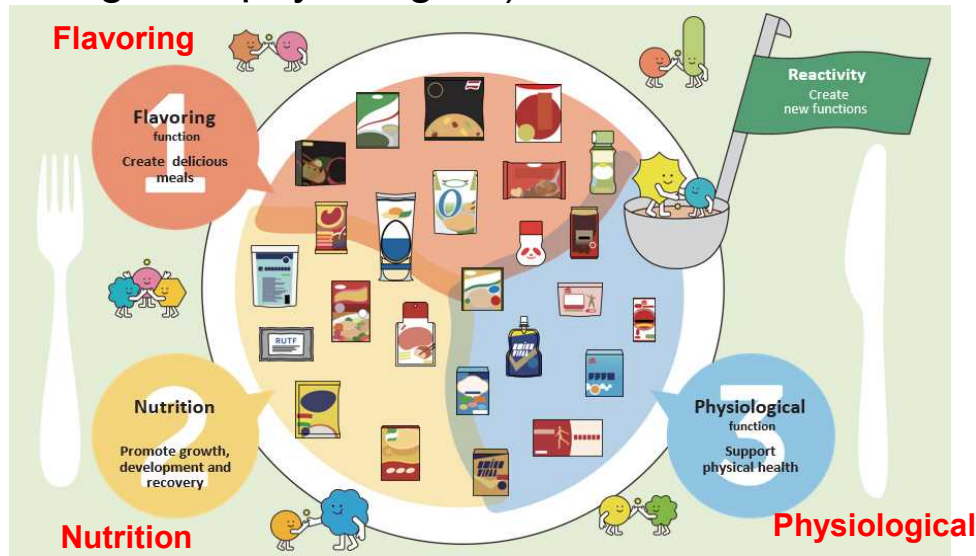
◆ Amino acids are the “Essence of life” for **all living things**



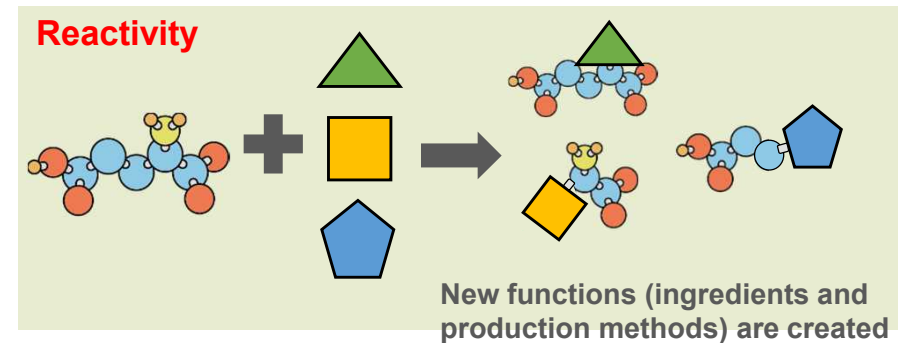
Humans



◆ Amino acids work for the three functions of food (nutrition, flavoring, and physiological)



◆ We utilize “reactivity” to create new solutions.



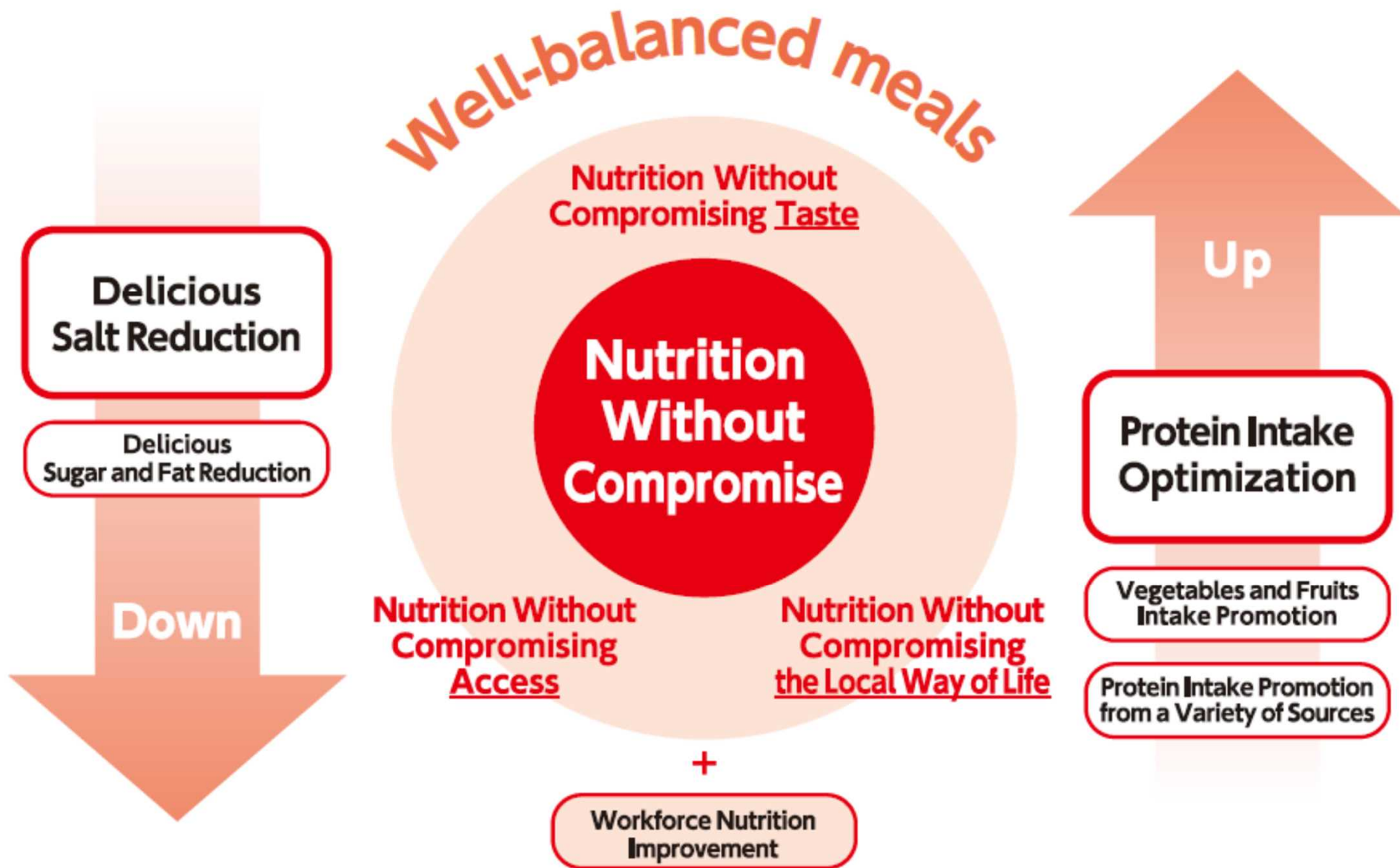
So, by unlocking the power of amino acids, **we can resolve the food and health issues** associated with **dietary habits** and **aging**.

Reason to believe

2. Initiatives to Extend the Healthy Life Expectancy of 1 Billion People



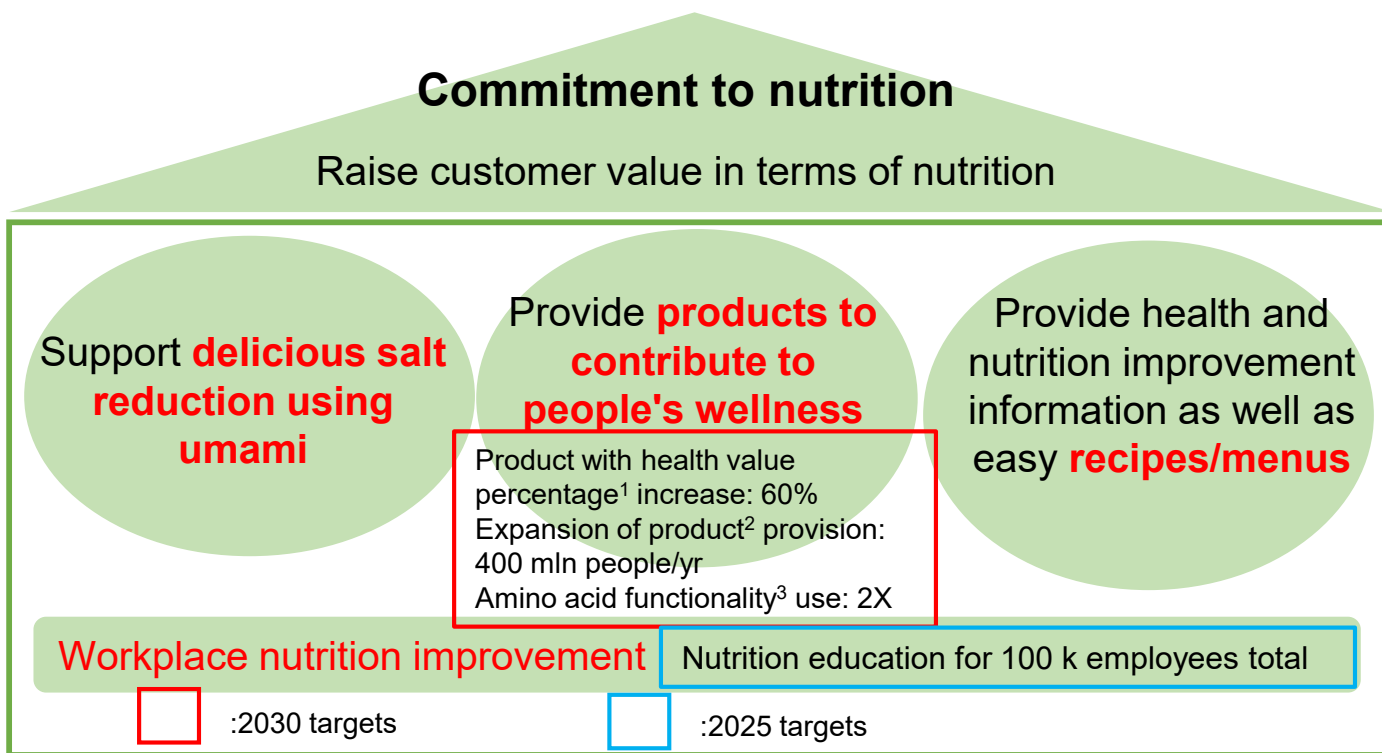
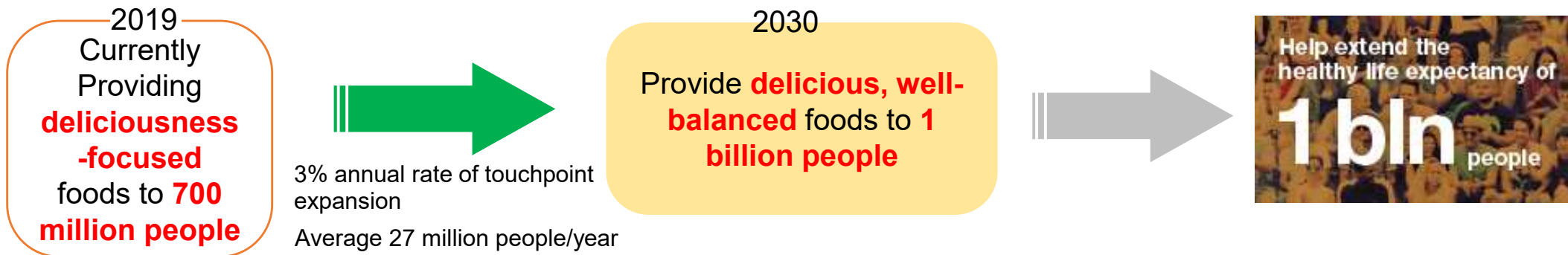
Nutrition Without Compromise



Path toward Extending the Healthy Life Expectancy of 1 Billion People



In our **commitment to nutrition**, we have established specific targets for improved nutrition by the year 2030.



&

- **Innovation**
(collaboration with academia)
- **Ecosystem creation** and social implementation
(collaboration with multi-stakeholders)

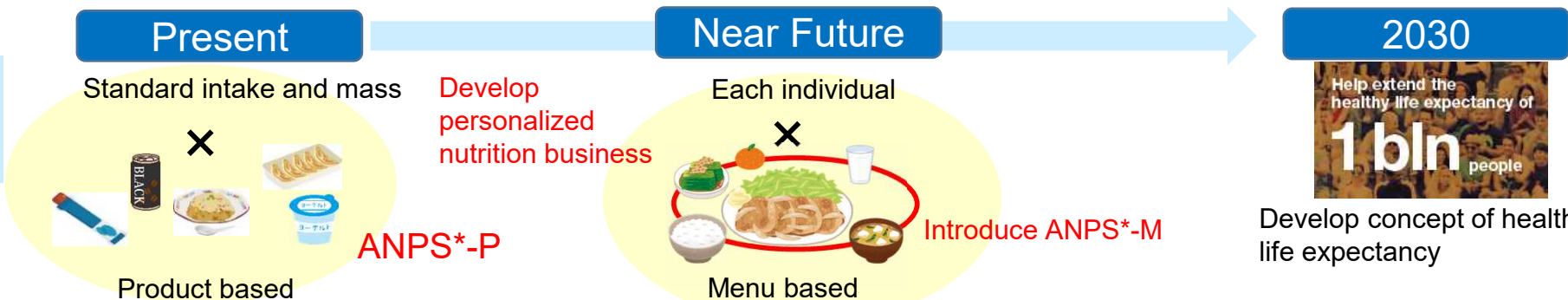
1. Products with enhanced nutritional value (reduction in salt, saturated fat and other nutrients with concerns about excessive intake and increases in protein, vegetables, and other recommended nutrients).
2. Products that promote delicious salt reduction and protein intake.
3. Opportunities for use of products that use the nutritional and physiological functionality of amino acids.

Path toward Extending the Healthy Life Expectancy of 1 Billion People



Visualize and quantify outcomes and put onto international agenda

Visualization of nutritional value

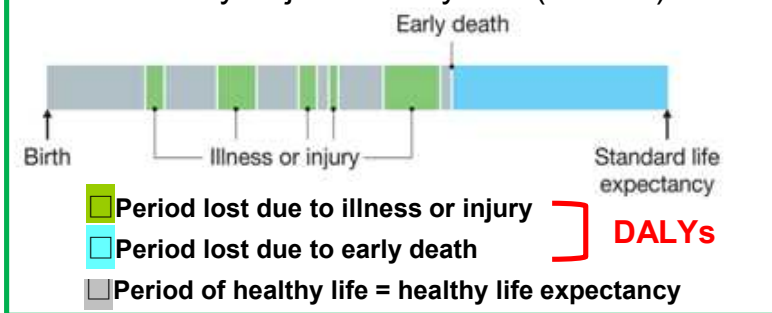


*ANPS: A tool for analyzing and scoring the amount of nutrients in food and visualizing their nutritional value.

Assessment index

Visualize and quantify extension of healthy life expectancy

Use disability-adjusted life years (DALYs)



Visualize and quantify subjective well-being



Connections with people
Creating and eating together, etc.

Put well-being onto the agenda

Collaborate with well-being initiatives



Delicious Salt Reduction: An Example of a Specific Initiative toward Extending the Healthy Life Expectancy of 1 Billion People



“Smart Salt” Project

Delicious salt reduction using umami and dashi broth!

< Advertising >
Stream videos for a wide range of ages

Motivation for salt reduction



< Owned media >
Provide delicious salt reduction recipes

Encourage cooking practice



< Products >
High quality based on Ajinomoto proprietary technologies

Experience the deliciousness



Global Rollout

Low salt products

5 countries, 8 brands, 22 products





Explore impact of salt reduction using umami: Collaboration with academia

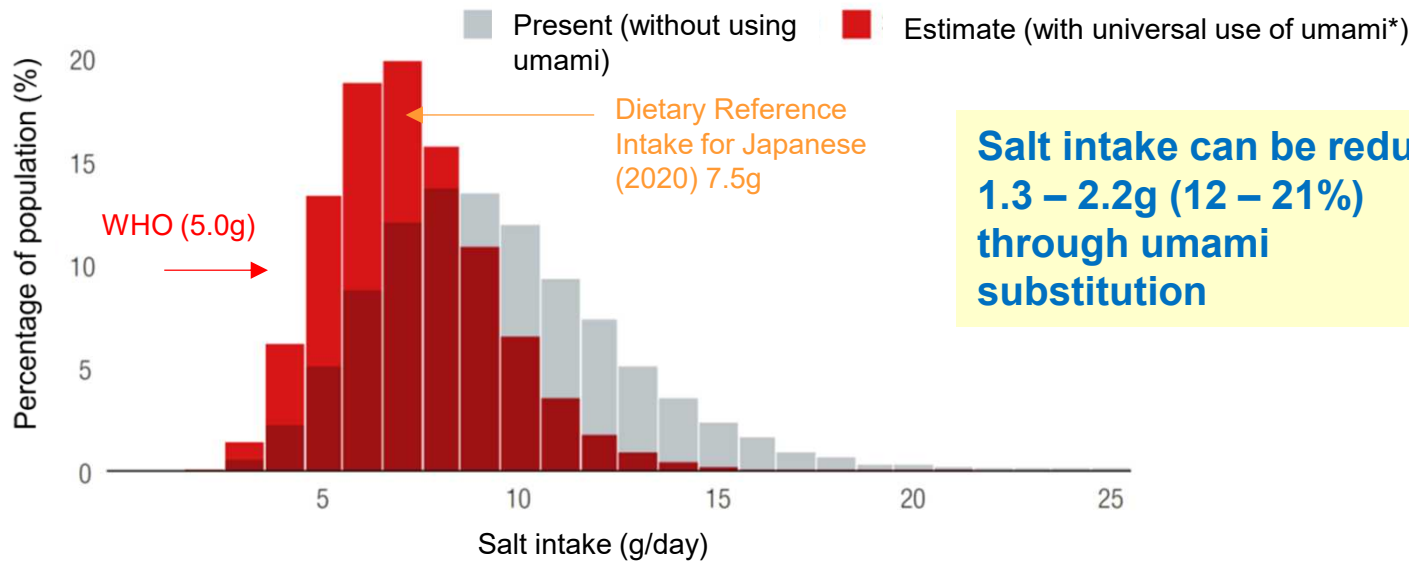
◆ Prior research in the U.S.

- Prior research conducted to evaluate the impact of salt reduction using umami in the U.S. packaged food products market.
- Conclusion: **MSG can be used to reduce salt intake** from packaged food products **by 3-8%**.

→ Plan to implement in major G20 countries and make an interim report at the Tokyo Nutrition for Growth Summit (Dec.)

◆ Research in Japan : U20 Healthy Umami Research Project (multiple collaborations with academia, including The University of Tokyo)

Estimated salt intake after using umami



➔ Next, we will visualize extension of healthy life expectancy by linking it with DALYs

(Collaboration with Tokyo City University)

*Refers to 100% replacement of food containing salt with reduced salt food using umami. Estimates by Nomura, Shibuya, et al. (The University of Tokyo)

Protein Alternatives: An Example of a Specific Initiative toward Extending the Healthy Life Expectancy of 1 Billion People



Efforts to balance nutrition improvement with reducing environmental impact

- ◆ Increase deliciousness of plant protein ingredients using deliciousness technologies



Expand knowledge and technology built up in Japan worldwide



Contribute broadly to increasing deliciousness of plant protein ingredients around the world

- ◆ Realize delicious protein ingredients with high nutritional value through collaboration



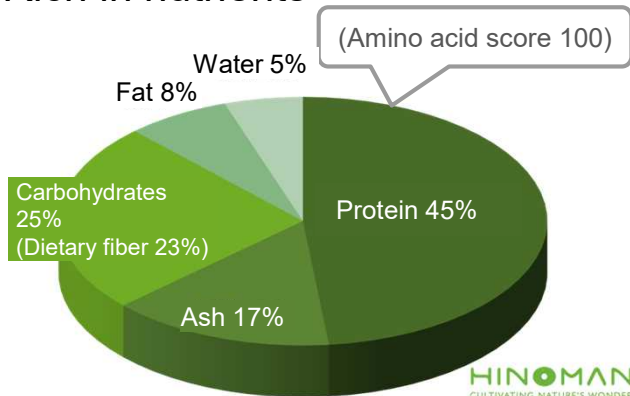
Sprouted soybeans with high nutritional value

Further improvements in nutritional value through amino acid analysis (sprouting method, etc.)

Enhance value added using amino acids and deliciousness technology

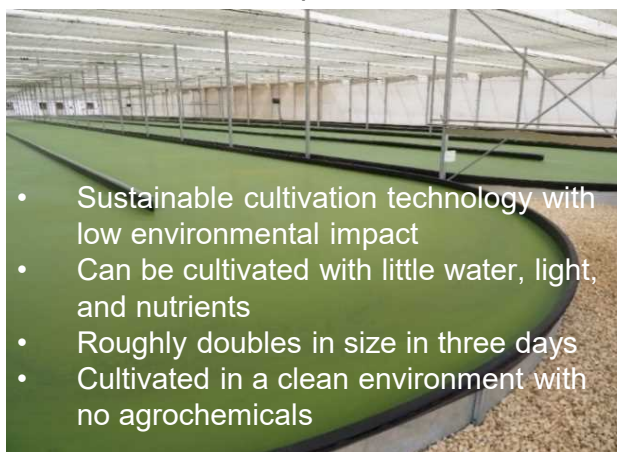
- ◆ Mankai: The world's smallest leafy green vegetable is a new source of environmentally-friendly protein.

Rich in nutrients



Nutritional composition (dried)

Efficient production with low environmental impact



- Sustainable cultivation technology with low environmental impact
- Can be cultivated with little water, light, and nutrients
- Roughly doubles in size in three days
- Cultivated in a clean environment with no agrochemicals



Commercialized as a healthy basic food



3. Initiatives to Reduce Environmental Impact by 50%



Greenhouse gas emission reduction rate
(vs. FY2018) (total of Scope 1 and 2)
FY2025: Reduce by 25%
FY2030: Reduce by 50%

Water use reduction rate^{*1}
FY2030: Reduce by 80% (vs. FY2005)
Recharge rate of drinking water into forest
FY2025: 100%+

Plastic waste
FY2030: Achieve “Zero”

Food loss and waste reduction rate^{*2}
(vs. FY2018)
FY2025: Reduce by 50%

Sustainable procurement ratio
FY2030: 100% of important materials

Initiatives to Reduce Greenhouse Gasses(GHG)



Entire Ajinomoto Group

2 mln t-CO₂ total

50% reduction by 2030

Carbon tax payment risk
2030: 20 billion yen
2040: 30 billion yen

TCFD recommendations-
based information disclosure
(Group-wide)

Chances Risks



Scope 2

Elec

Scope 1

Gas

Steam

Fuel oil

Coal

GHG emissions

GHG reduction measures

2) Procurement of renewable electricity

3) Energy conservation

1) Fuel conversion

Amino acid production method evolution

Innovation

Speed up through use of ICP*

Capital investment, financial impact *ICP: Internal carbon pricing

Status of Greenhouse Gas Reductions



- 1) Fuel conversion
- 2) Renewable electricity

Japan
1) Reviewing centralized purchasing for domestic Group companies
2) One plant approved

U.S.A.
1) One plant implemented
One plant under review
2) One plant under review

China
1) Two plants approved

Thailand
1) Six plants under review
2) Two plants implemented
One plant under review

Vietnam
1) Two plants under review

Malaysia
1) One plant under review
2) One plant under review

Philippines
1) Two plants under review
2) One plant under review

Indonesia
1) Two plants under review
2) One plant under review

Brazil
1) Three plants implemented
2) Two plants implemented



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Toward Regeneration of the Environment and Sustainable Food Systems

Bio-cycle (recycling-based production of amino acids through fermentation): Contribution to sustainable agriculture

Recycling-based production of amino acids through fermentation (bio-cycle) for sustainable procurement of crops while helping local agriculture to thrive is being introduced at fermentation plants around the world as a way to secure stable food resources and contribute to sustainable agriculture.

Main raw materials for amino acid production



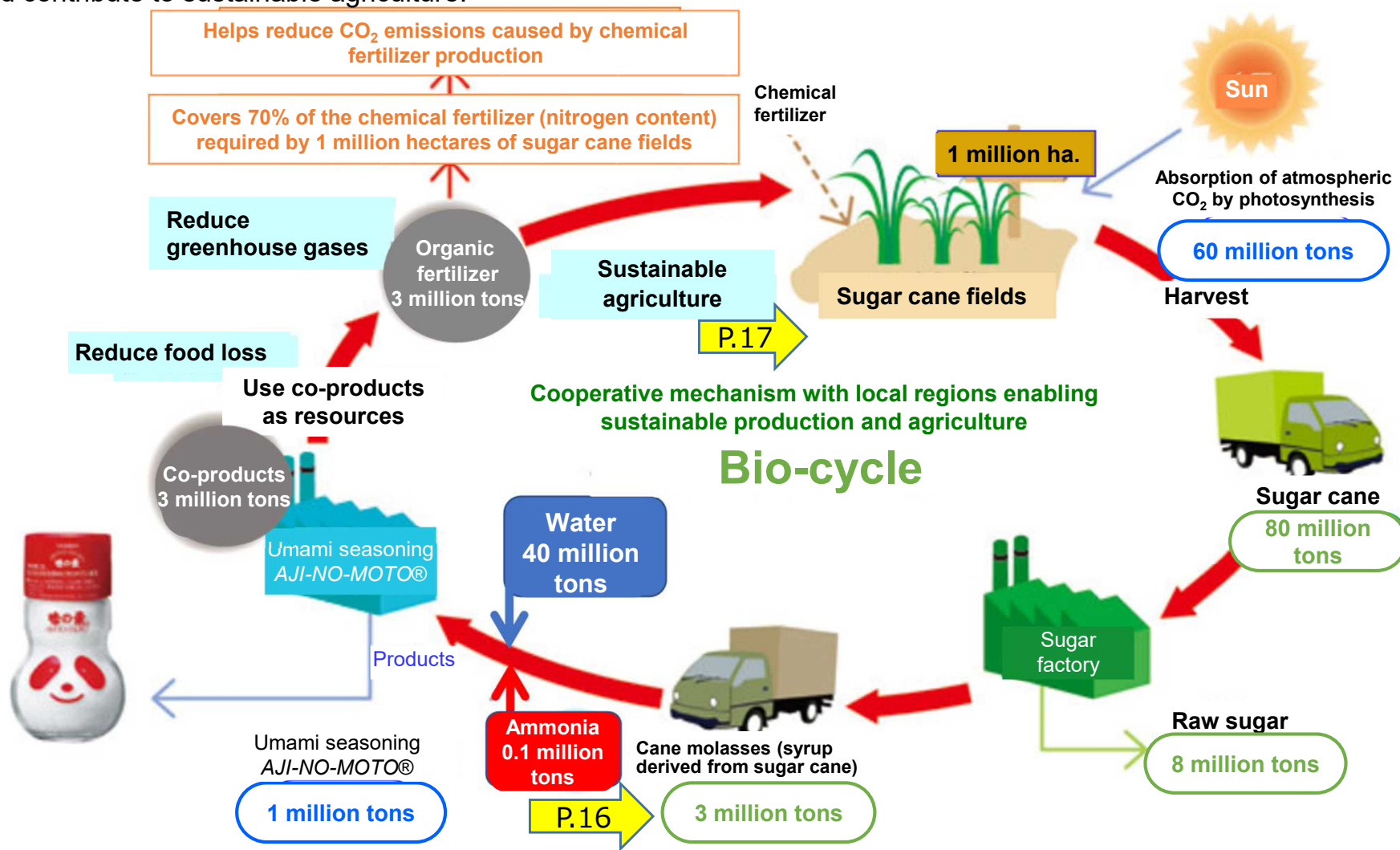
Sugar cane



Corn

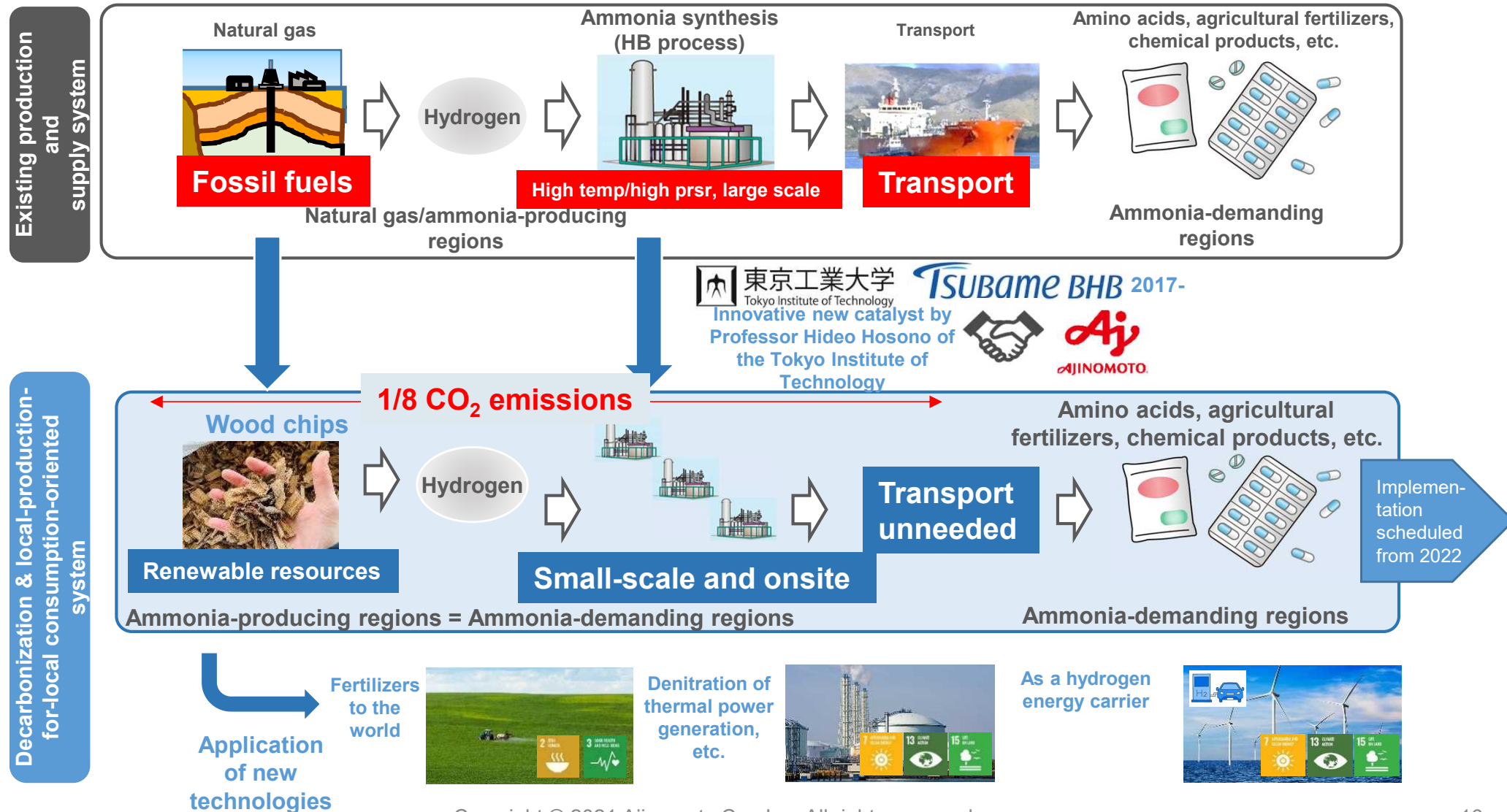


Cassava



Green Innovation in Ammonia Production and Supply

We will contribute to the environment through the realization of “**green ammonia**,” through the use of renewable resources and **the construction of a local-production-for-local-consumption system for ammonia production and supply** using innovative new catalysts



Contribute to Sustainable Agriculture

Example of Regenerative Agriculture Initiative in Thailand

Building an ecosystem with approximately 40 partners connected by "aspirations" based on fermentation and microorganism technologies

Universities Governments Corporations Private sector organizations

Expand agriculture support value chain



Streamline crop processing processes



Train agricultural human resources



Soil analysis



Agricultural development through fermentation technology



Supply system for Mosaic disease-free seedlings



Agriculture education and crop disease study groups



Collaboration with government (manufacturing and sales rights for agricultural materials, new agricultural insurance licenses, etc.)



Direct agricultural contribution value chain



Microbial fertilizer



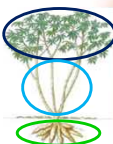
เราภูมิใจที่จะทำประโยชน์แก่เกษตรกรผู้ผลิต



Pipeline with Japanese and Thai governments

Dissemination of activities

Use agricultural residual value effectively



Climate insurance Financial assistance and loans



Use drones for spreading materials, image analysis, smart agriculture



Increase crop value added



Increase crop productivity



Joint agricultural development with universities and research institutions



Develop agriculture apps and databases



Unique collaborations with private sector companies (70% reduction in pesticides using adjuvants, connecting agriculture, food, and a better life, etc.)



Produce green ammonia from biomass (→ fertilizer and fuel) (planned)



Aj Electronic Materials Business: Contribute to Reducing Environmental Impact (Scope 3)

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We are contributing to **reducing semiconductor electric power consumption and the associated CO₂ emissions**, thereby helping to lower environmental impact.

- **Ajinomoto Build-up Film® (ABF)** reduces signal transmission loss.
- **Magnetic material AFTINNOVA®** increases semiconductor package energy conservation.

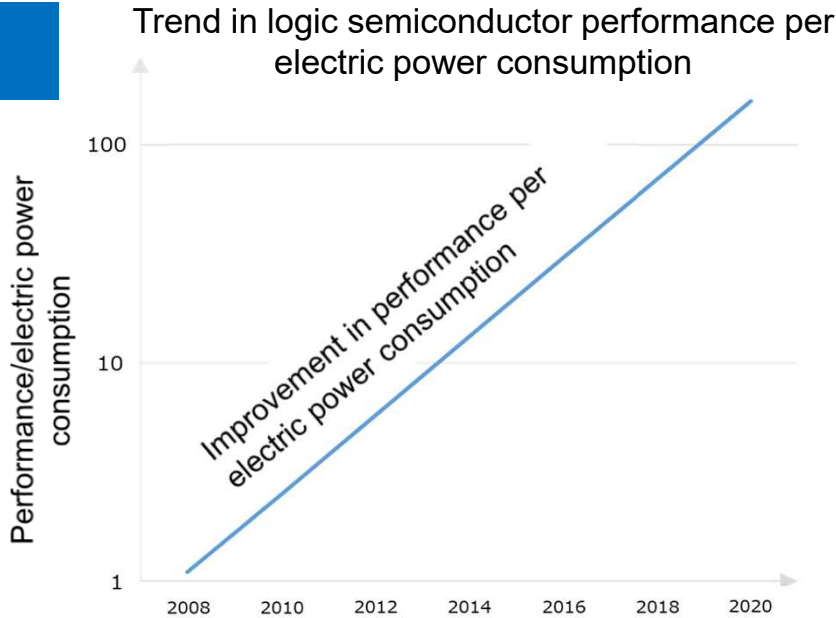
Ajinomoto Build-up Film® (ABF)



IC chip

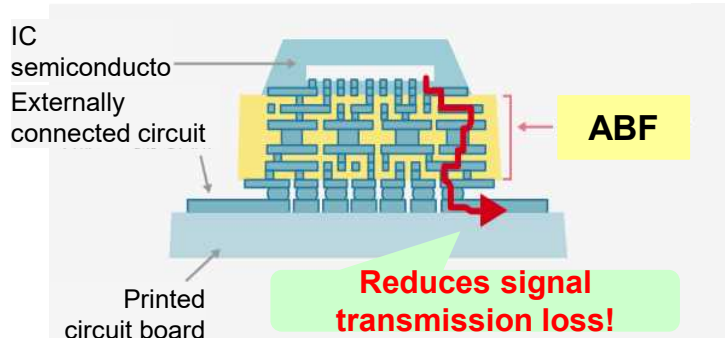


Semiconductor packaging substrate

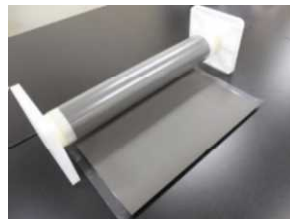


Reference: Summarizing CPU and GPU Design Trends with Product Data' Yifan Sun, et al.

Cross-section of semiconductor packaging



Magnetic material AFTINNOVA®



Expanding applications

PCs

Servers

Communication networks

In-vehicle

Industry

Eat Well, Live Well.



PRESS RELEASE

Ajinomoto Co., Inc.
15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, JAPAN

Ajinomoto to Issue Group's First SDG Bonds

**Funding Use Linked to ESG, Clarification of Efforts to
Resolve Food and Health Issues**

TOKYO, September 28, 2021 -- Ajinomoto Co., Inc. ("Ajinomoto Co.") has formulated a sustainable finance*¹ framework based on the four core components set out in the Green Bond Principles and Social Bond Principles of the International Capital Market Association (ICMA), namely (1) Use of Proceeds, (2) Process for Project Selection and Evaluation, (3) Management of Proceeds, and (4) Reporting. Based on this framework, we plan to issue sustainability bonds (unsecured straight bonds) as the Ajinomoto Group's first Sustainable Development Goals (SDG) Bonds in October in a public offering format in the Japanese domestic market, with an amended shelf registration statement for this issue submitted today to the Kanto Local Finance Bureau.

We will further accelerate our efforts to realize a sustainable society.

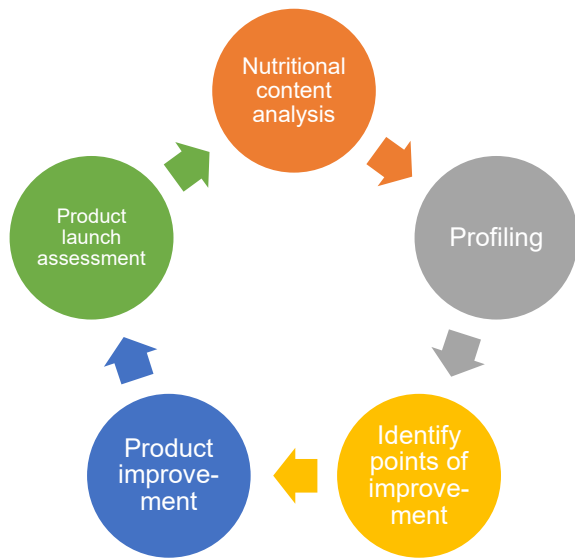
APPENDIX

ANPS: Visualization of Nutritional Value



Introduction of ANPS (The Ajinomoto Group Nutrient Profiling System)

Analyzes and scores food nutritional content and visualizes its nutritional value



Improving nutrition content with ANPS

ANPS-P: Assessment of products

Introduced and used in product development at nine companies in seven countries based on the Health Star Rating (HSR) System¹ (FY2020 results: 519 recipes²)



ANPS-M: Assessment of menus (after cooking)

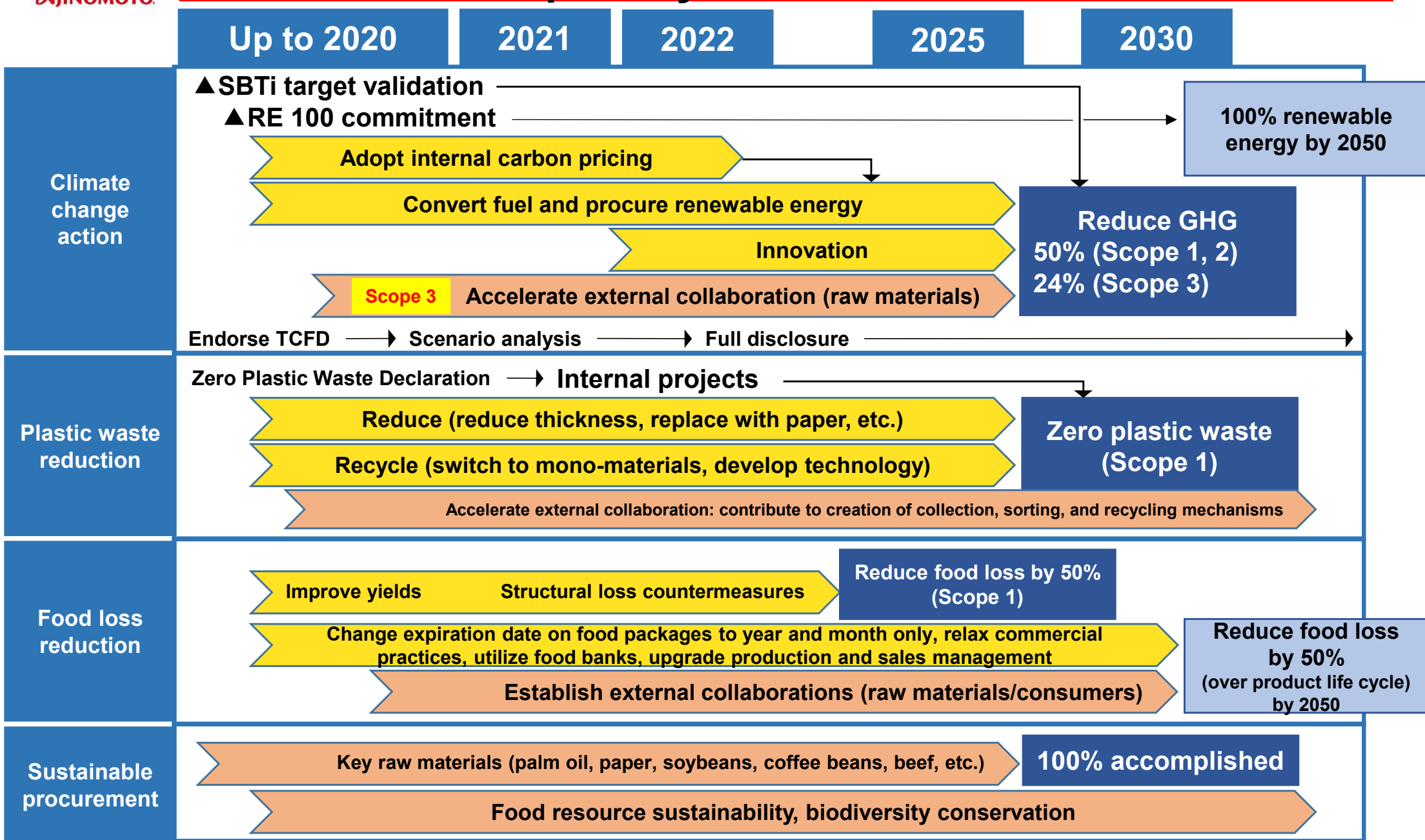
Currently under development.



1. Health Star Rating System (HSR): A nutrient profiling system (NPS) used in Australia and New Zealand.

2. ANPS is scheduled to be introduced at several additional companies in FY2021. As a result, it is expected that most of the major corporations with ANPS-target product groups can be covered by the system.

Path toward Reducing Environmental Impact by 50%



Eat Well, Live Well.

