

Reduction of food loss and waste

Global food loss and waste has risen to nearly 1.3 billion tons annually ^[1]. This figure represents one-third of all the food produced for consumption in the world. This food loss and waste occurs throughout the supply chain, from the farm to the dinner table. Food resources are limited. At the same time, the global population is growing and demand for food is expected to rise as well. In this context, reduction of food loss and waste is a critical issue.

The Ajinomoto Group aims to reduce food loss and waste through the product lifecycle, from the acceptance of raw materials to customer consumption. We will accomplish this effort by working closely with our suppliers and consumers.

[1] Source: Global Food Losses and Food Waste, 2011; Food Agricultural Organization

Specific examples

- Efficient use of materials
- Waste reduction in the distribution process
- Consumer edification (sustainable consumption, etc.)

Related opportunities and risks (○ Opportunity ● Risk)

- Cost reduction through efforts to improve yield in the production process, reduce product returns and waste
- Damage to corporate value due to delays in addressing food loss and waste

Key initiatives by the Ajinomoto Group

- Reduce losses in the production process
- Collaborate with suppliers, retailers, and distributors
- Optimize supply-demand/supply/sales balance and extend best-before dates
- Develop products useful in reducing waste
- Pursue greater usefulness and efficiency
- Engage in activities to reduce loss among consumers

Related SDGs



Reduction of food loss and waste

Contribution to reducing food loss and waste

Performance

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Food loss and waste: definition and scope

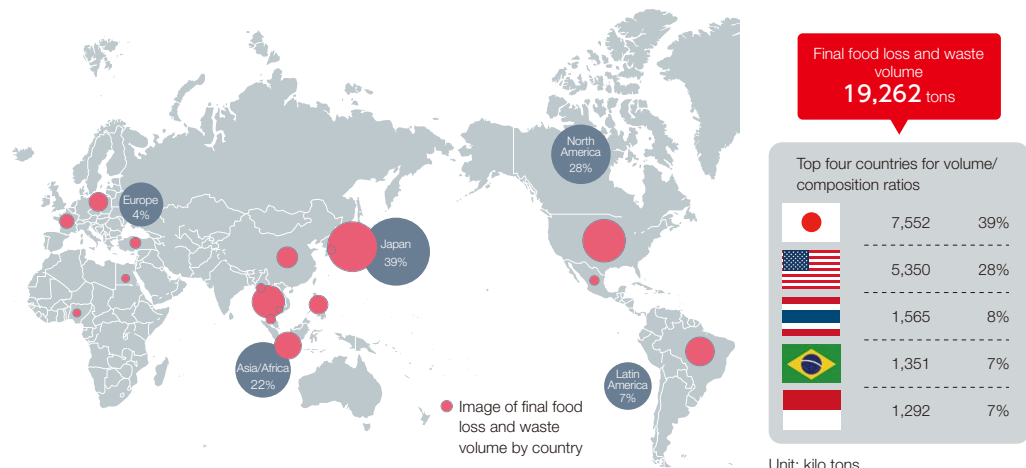
The Ajinomoto Group defines food loss and waste as food (edible portions) that is treated or disposed of in waste water treatment, landfill, or incineration. This definition excludes food ultimately redistributed for food use or used for feed or fertilizer. The major food loss and waste categories generated by the Group are as follows:

- Raw materials and materials in process: Disposal due to product revisions, production item changes, expired use-by dates, production incidents, etc.
- Products: Expired sales time limit caused by product revisions or inaccurate demand forecasting, product returns due to erroneous shipment, goods damaged at warehouse or at the time of delivery, disposal of sample items
- Loss due to standard factory operations: Waste generated by standard operations, including line cleaning to switch products and sample inspections

In measuring and aggregating results for fiscal 2021, we retroactively examined and reviewed results in accordance with the Group definitions.

As a result, the Group generated 19,262 tons of food loss and waste in fiscal 2021. Ratio by area is shown below.

Food loss and waste by area^[1] (fiscal 2021)



Reduction of food loss and waste

Performance

Food loss and waste reduction targets

The Ajinomoto Group is committed to a long-term vision to halve food loss and waste generated throughout the entire product lifecycle by fiscal 2050 as compared to fiscal 2018. Our first target is to reduce food loss and waste between the acceptance of raw materials and the delivery of products to customers by 50% by fiscal 2025 (compared to fiscal 2018).

The food loss and waste in fiscal 2021 decreased by 23% compared with the base year of fiscal 2018.

We will continue to minimize future losses and effectively utilize any that occur by turning them into feed or fertilizer. We believe that this theme is closely related not only to the importance of utilizing limited food resources, but also to various environmental and social issues.

In addition to the efforts made in our direct business activities (from acceptance of raw materials to delivery to customers), we will work to further reduce losses generated at the production stage of accepted raw materials and in the households of the consumers by collaborating with suppliers and promoting activities to spread awareness among society and consumers, with a view to the entire product life cycle.

Food loss and waste reduction rate per production volume unit

	FY2021 Target	FY2021 Result	FY2022 Target	FY2025 Target
Food loss and waste reduction rate from the acceptance of raw materials to delivery to customers (vs. Fiscal 2018)	27% decrease	23% decrease	30% decrease	50% decrease

Volumes of food loss and waste^[1]

		FY2018 (Base Year)	FY2019	FY2020	FY2021
Production volume (1,000 t) ^[2]		2,609	2,542	2,423	2,357
Food Loss and Waste	Total volume (t)	27,710	25,507	22,267	19,262
	Per production volume unit (per ton of product) (kg/t)	10.6	10.0	9.2	8.2
	vs. Fiscal 2018 (%)	—	95%	87%	77%

[1] Measured with reference to the Food Loss & Waste Accounting and Reporting Standard.

Past performance, including its measurement methods, is reviewed retroactively. (Measurement methods may differ between target organizations.)

[2] We used data different from production volume set forth in P77 and P110 for convenience of aggregation.

Food loss and waste reductions in the supply chain

The Ajinomoto Group has been promoting a range of measures to reduce issues with food loss and waste in each process of the supply chain, from raw material procurement through to consumption by customers. In production, we face the issue of raw material losses. To deal with this, we are promoting measures such as enhanced production and sales management, reducing manufacturing problems, improving yields, and reducing the frequency of product switching. Issues in logistics and sales include disposal of inventory and returned products, and disposal at distributors and retailers. Our efforts include improved demand forecasting, enhanced sales management, longer “best-before” periods, “best-before” labeling of month and year, and utilizing food banks. To respond to the issue of waste by customers, we are offering products that utilize our unique technologies and providing recipes with less food loss and waste.

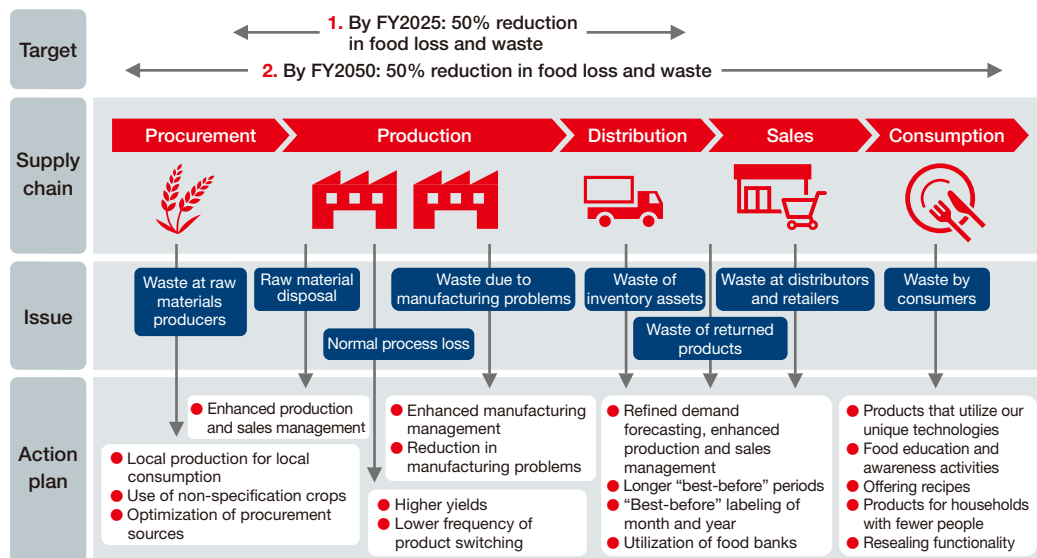
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Reduction of food loss and waste

Measures to achieve food loss and waste reductions in the supply chain



Unique technology to address food loss and waste

Enzymes are used in the food industry to manufacture a variety of products. In 1993, Ajinomoto Co. Inc. successfully commercialized *Activa*[®], the world's first food-use preparation based on transglutaminase, an enzyme that binds proteins together. We have been engaged in a range of applied research projects and product developments with the goal of enhancing transglutaminase's functionality in response to challenges faced with various food products. This enzyme is currently used in the production of a wide variety of food products worldwide, including meat products, dairy products, processed fisheries products, noodles, bread, and plant-based proteins, to improve texture and material properties, enhance formability, and inhibit deterioration over time. In this way, it contributes to enhanced productivity for food products, reduced costs, effective use of food resources, and less food loss and waste for customers.

Reducing food loss and waste by extending best-before dates

In the frozen food industry, products had been assigned fixed one-year best-before periods, regardless of their particular characteristics. This meant products' true best-before dates had not been verified. Ajinomoto Frozen Foods Co., Inc. conducted long-term preservation tests on all of its products, beyond the preservation test data stipulated by the Japan Frozen Food Association. It was able to extend the best-before periods of some products for one year to 1.5 years based on the results of this testing. The movement to review best-before dates spread throughout the industry, contributing to an industry-wide reduction in food loss and waste.

Eco-friendly life beginning with daily meals

In Japan, food loss and waste from households amounts to 2.76 million tons annually, representing half of all food loss and waste in the country (Ministry of Agriculture, Forestry and Fisheries estimate for fiscal 2018). The Ajinomoto Group strives to reduce household food loss and waste by encouraging eco-friendly eating in daily dining and food preparation. Eco-friendly eating consists of choosing environmentally friendly products and enjoying food without wasting ingredients.

■ Providing recipes

Since 2009, we have promoted *Eco-Uma Recipes*[®] (eco-friendly and delicious recipes) through websites and events, encouraging consumers to create delicious everyday meals without waste. In addition, the community site Food Fun! Discovery Community launched in 2019 features a user-generated topic calling for recipes for reducing food loss and waste, and this has featured lots of input from users.

Performance

Performance

Performance

> *Eco-Uma Recipes*[®]
(Japanese only)

> *Food Fun!*
Discovery
Community
(Japanese only)

> *PARK MAGAZINE*
(Japanese only)

Reduction of food loss and waste

From January to February 2022, the **AJINOMOTO PARK** campaign was held to gather and share honest opinions about fully using food ingredients at home. The **AJINOMOTO PARK** MAGAZINE takes opinions received from approximately 10,000 people and features selected ideas for using up food ingredients, recipes utilizing portions that are often discarded, and storage & freezing techniques that keep food tasty for a long time.



Preserving spinach by freezing it in an ice maker

> P91

■ Eco mark labels

In order to make consumers aware of product packaging improvements and our approach to environmental friendliness, we place our own eco marks (*Aji-na Eco*, *Hotto-suru Eco*, and *Aji-Pen® Eco* marks) on product packaging, to help customers incorporate environmental friendliness as one of their criteria when selecting a product.