Reduction of Food Loss and Waste and Upcycling

Material Issue
Environmentally Responsible MONOZUKURI
(Product Development and Manufacturing Practices)

Governance Strategy Risk management Metrics and targets Specific initiatives

Governance

The Fuji Oil Group has established the Sustainability Committee[*1] as an advisory body to the Board of Directors that is chaired by the President and CEO. From a multi-stakeholder perspective, the committee deliberates on and monitors Reduction of Food Loss and Waste and Upcycling, a priority action to address material ESG issues,[*2] and makes recommendations to the Board. The Group implements related initiatives under the oversight of the Head of R&D Headquarters, the Executive Officer.

*1 Governance, Strategy, Risk Management, Metrics and Targets > Governance
https://www.fujioil.co.jp/en/sustainability/sustainability_management/#governance

*2 Governance, Strategy, Risk Management, Metrics and Targets > Metrics and targets
https://www.fujioil.co.jp/en/sustainability/sustainability_management/#index

Strategy

As a manufacturer of food materials and ingredients, the Fuji Oil Group recognizes the efficient use of limited food resources as a material issue, given the concerns over future food supply posed by global population growth, climate change, and biodiversity loss. Food loss and waste reduction is an explicitly defined target of Goal 12 of the SDGs, and we view them as significant challenges for global society. It is the responsibilities of companies to respond to these challenges, and failure to do so will increase the risk of a decline in social reputation. We believe that successfully addressing food loss and waste will be economically beneficial, leading to a reduction in product cost including the cost of waste processing.
As a manufacturer of intermediate food materials, our Group provides products that help extend the best-before date of our customers' products to in turn reduce end consumers' food waste, and also aims to effectively use resources through upcycling.

Risk management

The Fuji Oil Group systematically manages risks and opportunities related to Environmentally Responsible MONOZUKURI (Product Development and Manufacturing Practices), an area of sustainability matters that address the material ESG issues, in alignment with Group significant risks.

Group significant risks
Risk type: Strategy/ Environment and human rights/ Procurement
https://www.fujioil.co.jp/en/ir/policies_and_systems/risk/

We are working on the following research and development initiatives in order to keep up with ever-changing social needs and address issues:

- Offer customers product concepts and application formulas in a single package that helps resolve social issues

Metrics and targets

○ At least 90% complete △ At least 60% complete ✕ Less than 60% complete

FY2024 Goals	FY2024 Results	Self-assessment
Develop technologies and products to maintain food quality longer and extend best-before dates	Ten products launched using technologies including advances in cream freezing/thawing techniques, and a unique fermentation technique to improve the flavor of cheese	○
Seek new functions and value through proactive and effective use of waste	Development and initial adoption of applications for soybean fiber and soy polysaccharides	○

Analysis

Our new types of cream, which help extend best-before dates of customers' products, have been adopted by several companies as a result of customers' better knowledge and cooperation in maintaining product quality. A customer has also obtained new sales opportunities by expanding the food product lineup.

Next steps

We will focus our efforts on developing ingredients and technologies that maintain the "freshly made" quality of foods. We will also search for ways to make good use of what is typically discarded as waste. In FY2025, we will continue working on the following goals set in FY2024:

- Develop technologies and products to maintain food quality longer and extend best-before dates
- Seek new functions and value through proactive and effective use of waste

Specific initiatives

Developing ingredients that sustain food quality

Extending the best-before dates of products is one of the key measures promoted by the Japanese government to reduce food waste. By providing technologies and materials that maintain quality, Fuji Oil Co., Ltd. makes retort pouch foods and other non-perishable food products more delicious and varied, which also helps reduce food waste.
With recent labor shortages and measures against food waste, there is rising demand for chilled desserts (Western-style confectionaries) that are pre-frozen for storage and thawed before sale. This has led to a requirement for whipped cream that can withstand frozen storage. In response to this demand, by combining multiple vegetable oil and fats ingredients with our own emulsifying technology, in FY2024 we successfully developed a whipped cream with frozen storage resistance, which is rapidly being adopted in the market.

Wishing to make the delicious taste of mature cheese accessible to more people, we have developed our own fermentation process, which has taken over a decade of research. Using this process, we have created Honjuku® Fromage P, an easy-to-handle product providing a similar flavor profile to aged cheese together with a natural Parmigiano Reggiano-like aroma without relying on flavorings. Honjuku® Fromage P is highly rated by customers for its ability to create an intense cheese taste using only a small amount.


Honjuku® Fromage P

Example dishes: Pasta with cheese sauce

Cheesecake

Expanding the use of upcycled product SoyBio MA to treat polluted soil

Fuji Oil Co., Ltd. has been providing nutritious food ingredients like soy meat, soy proteins and soy peptides for many years. The processing of these food ingredients produces soy whey as a by-product, which is rich in natural nutrients and produced after separating and heat-concentrating the proteins from soybeans. We have upcycled this soy whey to produce and market SoyBio MA, a resource-recycling bioremediation* agent for detoxifying polluted soils (Distributor: Shoei Yakuhin Co., Ltd.). SoyBio MA works by serving as a source of nutrition for microorganisms that break down toxic substances. The product is especially effective in bioremediation of industrial brownfield sites that have been polluted by volatile organic compounds (VOCs) and oil. SoyBio MA also has a lower price than other soil amendments in the market, helping to reduce project costs. It is being steadily adopted in several projects per year, such as in the purification of contaminated groundwater.
The VOC purification method using SoyBio MA has been recognized by Tokyo Metropolitan Government as a technology to prevent the spread of groundwater contamination (FY2024). We aim to use this as an opportunity to promote more widespread use of this purification method.

SoyBio MA

* Bioremediation: A process of harnessing the natural activity of microorganisms to remediate polluted soil