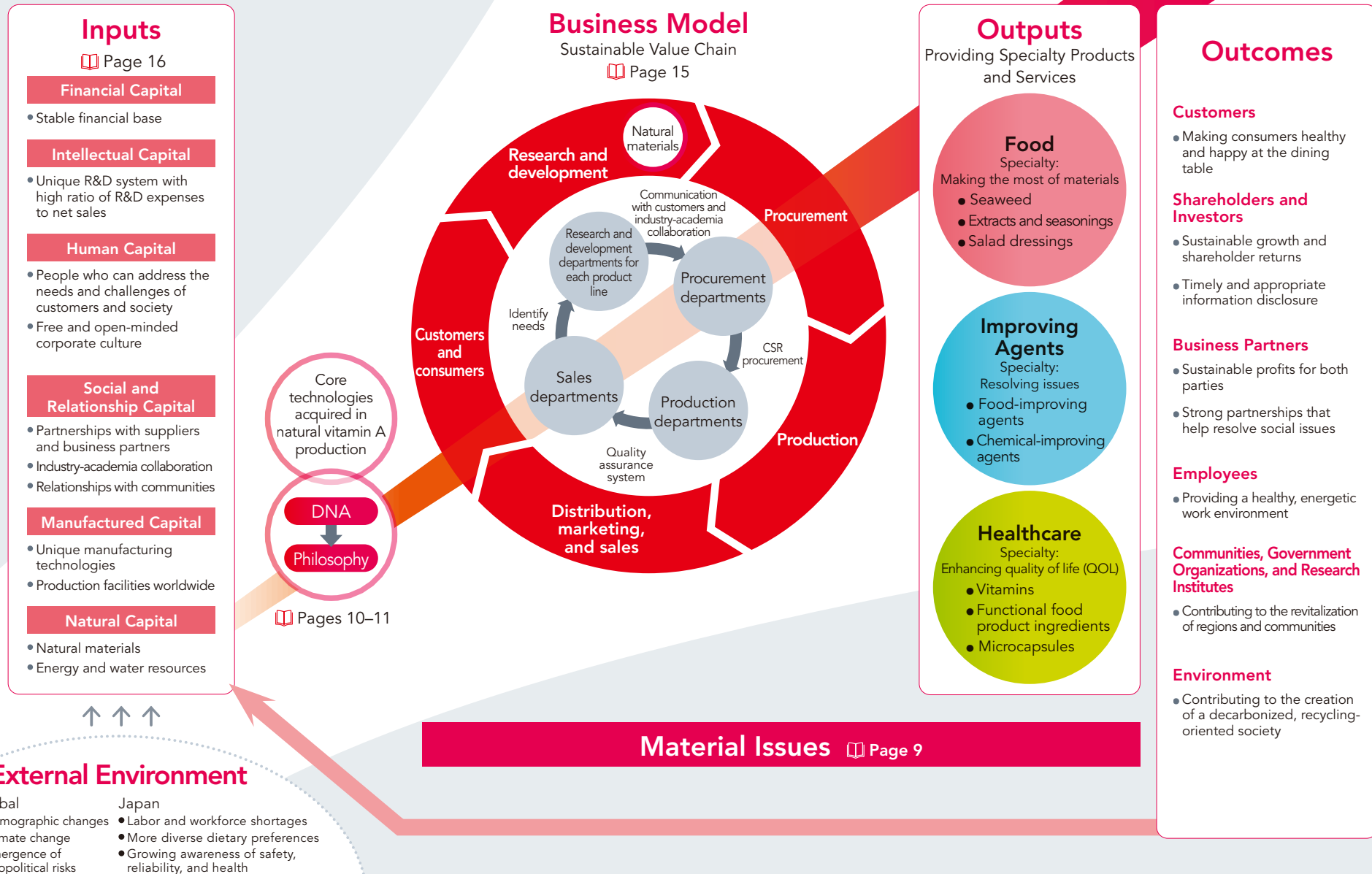


Value Creation Process

Supporting a Sustainable Society with Specialty Products and Services

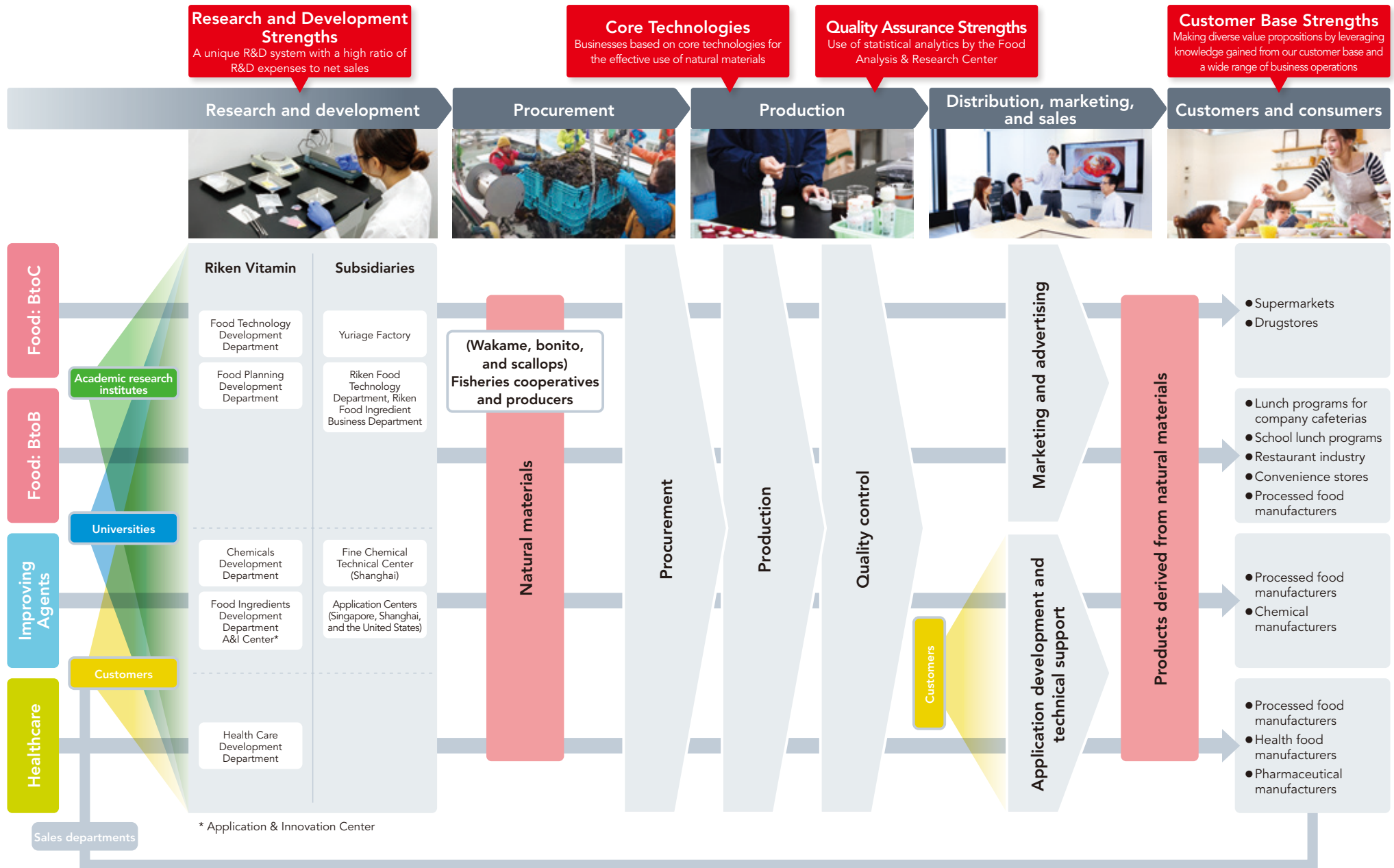
Medium- to Long-Term Vision

Achieving growth by supporting a sustainable society with specialty products and services




Value Chain

Creating Added Value with Technology That Effectively Uses Natural Materials



Enhancing Our Value Chain

Main types of capital for each activity and initiatives to further enhance them

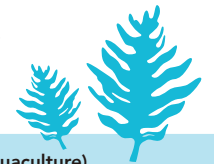
	Research and development	Procurement	Production	Distribution, marketing, and sales	Customers and consumers
Capital Relevant to Our Strengths	Research and development strengths	Distribution channels for natural materials	Technologies that use natural materials	Ability to provide solutions	Broad customer base Household food brands
	Financial Capital	Financial Capital	Financial Capital	Financial Capital	
	Intellectual Capital	Intellectual Capital	Intellectual Capital	Intellectual Capital	Intellectual Capital
	Human Capital			Human Capital	
	Social and Relationship Capital	Social and Relationship Capital	Social and Relationship Capital	Social and Relationship Capital	Social and Relationship Capital
			Manufactured Capital		Manufactured Capital
	Natural Capital	Natural Capital			
Overview	With roots in RIKEN (the Institute of Physical and Chemical Research), we focus on research and development based on our Corporate Philosophy of “contributing to people’s health and nutrition with technologies and products that make effective use of natural materials, thereby contributing to society.”	We have a procurement network for natural materials, including marine resources. Our knowledge of natural materials and our procurement network enable us to operate in a wide range of businesses.	Our core technologies that originate in our initial vitamin A business involve extraction, refining, and concentration. Our molecular distillation technology, which is a concentration technology, has contributed significantly to the diversification of our business portfolio.	In the improving agents business, we communicate with a wide range of customers to gain an understanding of their issues and needs, and then provide proposal-based sales and customized product development.	Our products are widely used in three markets: food, improving agents, and healthcare. As a result, we have an extensive customer base and are able to make a variety of proposals to our customers.
Medium-Term Management Plan Measures	Further expand presence in domestic market and enter new domains		Accelerate expansion in Asia and North America	Further expand presence in domestic market and enter new domains Accelerate expansion in Asia and North America	
	Promote sustainable management				
Initiatives to Enhance Our Value Chain	Unique R&D organization <ul style="list-style-type: none">● Accumulate knowledge in R&D departments for each product line● Share knowledge within the Group through research presentations● Ensure collaboration among the A&I Center and overseas application centers High ratio of R&D expenses to net sales <ul style="list-style-type: none">● Ratio of R&D expenses to net sales: 3.6% Tokyo Stock Exchange, Prime Market (Food Sector) Average for 67 companies excluding Riken Vitamin: Approximately 1.0% Note: Data for FY2023	Initiatives for stable procurement <ul style="list-style-type: none">● Supporting large-scale wakame aquaculture in cooperation with a fishing company and a fisheries cooperative● Stable procurement of seaweed by supplying seedlings● Strengthen cooperation with suppliers Enhance internal organization <ul style="list-style-type: none">● Promote collaboration with the procurement departments during development	Raise production capacity at overseas factories <ul style="list-style-type: none">● China: Construction of new food-improving agent factory (Scheduled to start operation in April 2025)● United States: Expansion of pork extract manufacturing facilities (Scheduled to start operation in summer 2026) Reorganize factories in Japan <ul style="list-style-type: none">● Tokyo Factory: Construction of a new vitamin-mix wing (Scheduled to start operation in fall 2025)* <small>* Entire project scheduled for completion in FY2027</small>	Provide a wide array of solutions <ul style="list-style-type: none">● Enhance ability to make proposals Develop sales personnel with broad product knowledge through interdepartmental personnel transfers● Expand range of proposals Two approaches for proposals: Reduction of loss during production and reduction of final product disposal Enhance ability to make proposals outside Japan <ul style="list-style-type: none">● Opened Riken Vitamin USA Application Center in June 2024  Page 33	

Increasing the Sustainability of Natural Capital

Achieving a Sustainable Seaweed Industry

Seaweed has been eaten in Japan for a long time and is recognized as a healthy food, but research into its ecology has not progressed much and production volumes are declining.

The Riken Vitamin Group is using the results of its research into wakame to ensure stable production at aquaculture sites. We will also expand the scope of our research to include mozuku and other types of seaweed to contribute to the revitalization of the seaweed industry.



Issue

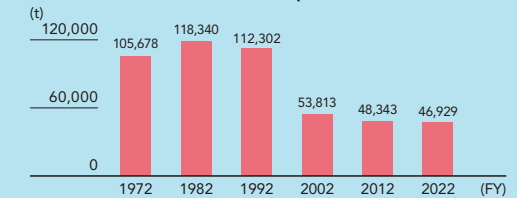
Production of wakame has decreased in Japan over the past several years due to the aging of fishermen and changes in the marine environment. Stable procurement of raw materials has therefore become a key issue for the Group.

Rising sea temperatures

Aging of fishermen

Intense workload during harvest season

Wakame Harvest Volume (Aquaculture)



Source: Ministry of Agriculture, Forestry and Fisheries, "Survey on Marine Fishery Production" (Annual statistics on aquaculture production by species)

Action 1

Initiatives at the Yuriage Factory

We are using cutting-edge technology and equipment to explore new possibilities for seaweed.

We opened the Yuriage Factory in 2017 and began producing wakame seedlings. By ensuring the stable production of high-quality seedlings, we can support improved productivity in seaweed farming. In addition, the death of juveniles in the early stages of growth reduces production in wakame farming, so we are continuing to research the stress resistance of seedlings using the knowledge we have gained from optimizing seedling production conditions, and are beginning to obtain results that will support better farming techniques. Moreover, we are proposing the use of both early-maturing seedlings and late-maturing seedlings to lengthen the wakame harvesting period and lessen the workload during harvesting.



Action 2

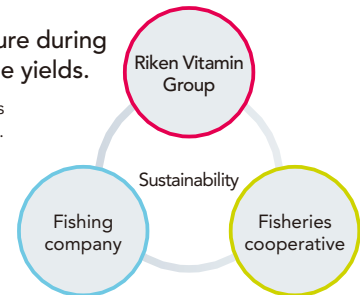
Initiatives in the Ryori District of Ofunato City, Iwate Prefecture

We began supporting large-scale aquaculture during the 2020 harvesting season to ensure stable yields.

In Iwate Prefecture, the Group collaborates with a local fishing company and fisheries cooperative to support large-scale wakame aquaculture using idle aquaculture sites. We provide wakame seedlings and production expertise, then purchase all of the wakame that the fishing company produces. This enables the Group to procure a stable supply of raw materials. Our approach also enables the fishing company to generate stable income, and the fisheries cooperative to make effective use of idle aquaculture sites. The Group will continue to help revitalize the seaweed industry.



This video presents our initiatives to revitalize the seaweed industry.



Outcome 1

Riken Vitamin Group

Stable raw material procurement

Producers

Improve production efficiency by lengthening work periods

Increase production volume by using high-quality seedlings

Outcome 2

Riken Vitamin Group

Ensuring stable production volume in response to environmental change

Local fishing company

Ensuring a stable source of income

Ryori Fisheries Cooperative

Decrease in idle aquaculture sites
Reduced management costs

In addition to initiatives to ensure a stable supply of raw materials and provide services that address environmental changes such as climate change, we are also conducting research on blue carbon.*

This includes work with universities and research institutes to establish technologies for quantitatively evaluating CO₂ fixation by seaweed beds.

* A term coined by the United Nations Environment Programme (UNEP) in 2009 that refers to the carbon stored in marine ecosystems such as seagrass beds, seaweed beds, wetlands, tidal flats, and mangrove forests.

Value Creation Case Studies: Food Business

Extracts and Seasonings Where Nothing Goes to Waste

Contributing to a Rich Dietary Life by Effectively Employing Unused Resources

We launched our food business when whaling was still common, producing extracts from whale meat* by-products not used for food after processing. Simply disposing of those by-products would have incurred disposal costs and caused environmental issues, but Riken created new value by using them as a resource.

We will contribute to a sustainable and rich dietary life using the extraction, refining, concentration, and processing technologies we have developed since our founding, and by effectively employing unused resources.

* We no longer produce whale meat extracts.



Takehiko Watanabe
Executive Officer
General Manager of Food Technology
Development Department

Riken Vitamin's Specialties

► Seasoning blending technologies

Our unique seasoning blending technologies that utilize naturally derived ingredients help to make consumers healthy and happy at the dining table.

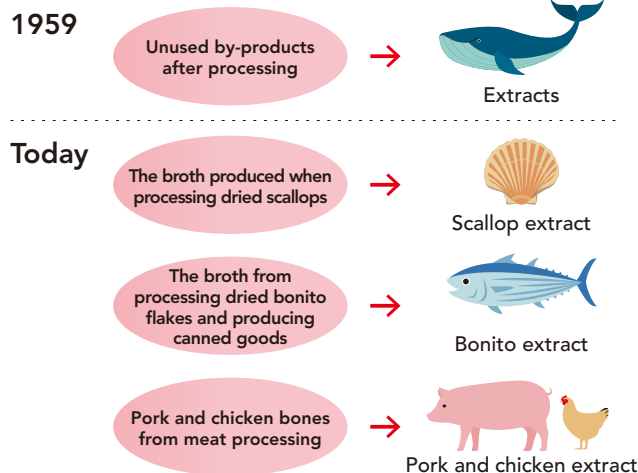
► Development and procurement of original raw materials

Delicious taste derived from natural materials is our goal for products such as scallop extract that has the top share of its market in Japan and Sozairyoku Dashi made with the finest ingredients.

Value the Food Business Delivers

Raw Material Development

✓ Effective employment of unused resources



Processing Technology Development



Product Development



Value Creation Case Studies: Improving Agent Business

Food-Improving Agents That Support Food Production Sustainability

Contributing to Sustainability

In food production, sustainability means a steady, continuous supply of food.

In recent years, the business environment for the raw materials used in processed foods has become increasingly unstable. Changes in the quality and composition of raw materials not only impact the final product, but also cause various issues related to manufacturing and lead to food loss. We resolve these issues by combining emulsifiers and other materials to develop food-improving agents that meet customer needs.

We will contribute to the sustainability of processed food production through our food-improving agents.



Takeshi Kitagawa
Executive Officer
General Manager of Food Ingredients
Development Department

Riken Vitamin's Specialties

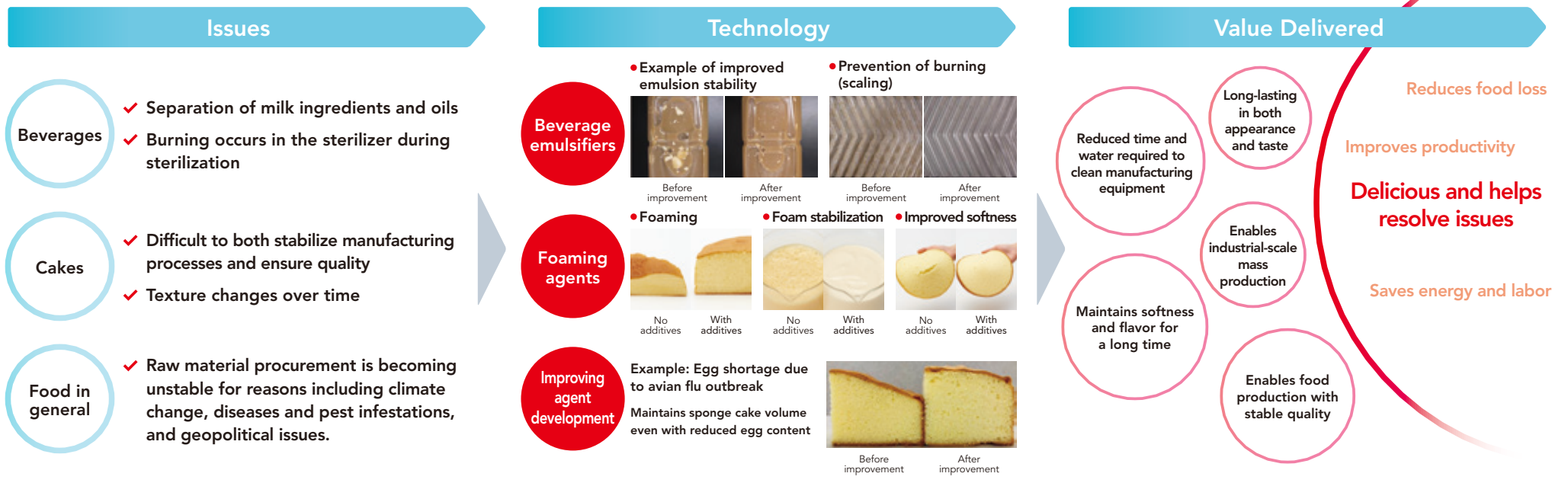
► Providing solutions

We contribute to reducing food loss as well as energy and labor savings with solutions for improved productivity.

► Discovery of new issues

We discover new issues by looking at changes in society and information we gain in the process of providing value to customers in a wide range of fields.

Value the Improving Agent Business Delivers



Value Creation Case Studies: Healthcare Business

Providing Vitamins Customized for Individual Needs

Resolving Issues for Manufacturers and Supporting Human Health

In recent years, the market for food and beverages that contain vitamins has been expanding due to increased health awareness, due partly to the aging population and the COVID-19 pandemic. However, sourcing multiple types of vitamins and manufacturing the products that contain them are very costly and time-consuming for food and beverage manufacturers.

We help resolve these manufacturing-related issues by providing manufacturers with premixes that contain vitamins in the right balance. As such, we also indirectly contribute to human health by facilitating the addition of vitamins to a variety of products.



Katsura Murakami
General Manager of Health Care Development
Department, Health Care Unit

Riken Vitamin's Specialties

► Vitamin production and formulation

We use the technologies we have developed since our founding to supply various vitamin products and vitamin premixes for general foods, health foods, and pharmaceuticals.

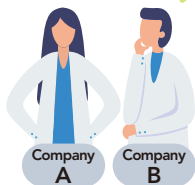
► Vitamin processing technology

We process fat-soluble vitamins into a powdered form that disperses easily in water, improving versatility and heat and oxidation stability.

Value the Healthcare Business Delivers

Issues

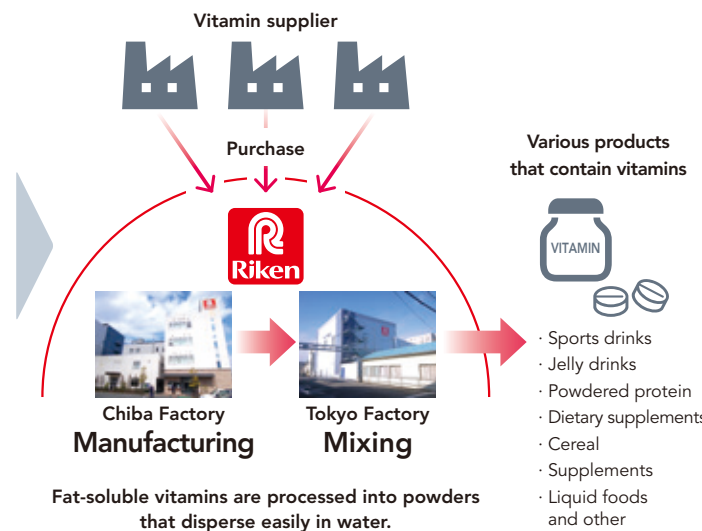
- ✓ Sourcing multiple types of vitamins individually incurs costs and requires weighing time.
- ✓ Different types have different physical properties, making handling complicated.
- ✓ The recommended intake amount is so small that using the entire purchased amount is challenging.
- ✓ Fat-soluble vitamins are unstable and have a viscous oily texture, making them difficult to handle.



- ✓ Desire to take several supplements (vitamins) efficiently at one time

Consumers

Technology



Value Delivered



Improved health and quality of life

Improves productivity
Improves nutritional balance

Healthy and helps resolve issues

Easier to take

More opportunities to take

- Reduced management and procurement costs
- Reduced production requirements (reduced weighing time and improved handling)
- Reduced weighing errors
⇒ Reduced personnel/labor requirements and losses due to operational errors
- Stable quality because each vitamin is uniformly dispersed and mixed