



Special Feature: R&D

Innovative Contributions to Enjoyable Wellness

Global Shift in Consumer Preferences toward Natural and Healthy Products

For decades, the growth of the world beverage market was driven by consumer demand for carbonated soft drinks containing sugar. In recent years, however, a growing focus on health and a shift to RTD coffee and tea products have been reflected in increasing consumption of water and non-carbonated soft drinks, which now account for around 70% of the total market. This trend has been especially pronounced in Japan, where the percentage of water and non-carbonated soft drinks has risen to around 80% of the total market. This is even higher than the levels in Europe and North America. SBF believes that this shift in beverage demand will continue, and that consumers will increasingly seek beverages that are further natural and healthy. SBF will respond to these needs by accelerating its development of products that provide enjoyable wellness by combining emotional fulfillment with delicious taste and healthiness.

Research and Development— The Lifeblood of a Manufacturer

To achieve continuing business growth, SBF needs to provide consumers with high-added-value products that explore new needs. Since its founding, the Suntory Group has recognized the importance of research and development as the lifeblood of a manufacturer. This philosophy is reflected in a record of achievement accumulated through decades of R&D activities.

Through the process of developing various products, starting with liquor & spirits manufacturing, the Suntory Group has deepened its knowledge of distillation technology and the

technologies needed to utilize microorganisms and enzymes. In addition to these technologies, SBF also uses knowledge gained through other types of R&D, such as the exploration of new health-related ingredients, research into health benefits, and water science. We apply these capabilities to create new flavors and ingredients based on natural materials.

Co-creation of Global Value

Our mission is to provide consumers worldwide with satisfying, reliable, and safe products. Since the founding of SBF, our MONOZUKURI, or manufacturing, activities have been guided by the fundamental values and principles of MONOZUKURI that are today shared throughout the SBF Group as the "MONOZUKURI Way." As noted earlier in this report, the Japanese market is leading a trend toward products that are more natural and healthy. SBF has reflected this trend in its own product portfolios, which are "natural and healthy" and "unique and premium." We are confident that we can use our technology development capabilities and expertise in overseas as well as domestic markets.

In addition to our continuing efforts to provide new value, we also explore taste experiences that match consumer preferences in various markets. To ensure that our activities closely reflect consumer needs in every region, we apply a consumer-centric approach to all aspects of our global product development activities. The global SBF Group aims to provide consumers around the world with enjoyable wellness through synergies made possible by its many brands, its technologies, and its expertise.

STRATEGY OF GLOBAL R&D

“We are strengthening mutual understanding and trust throughout the Group with an approach based on local autonomy, with the aim of enhancing global synergies in R&D.”



Teruyoshi Morikawa
Senior General Manager
Research and Development Department
MONOZUKURI Division
Suntory Beverage & Food Limited

Role and Function of the Research & Development within the MONOZUKURI Division

Our key role is to support independent product development activities in each region, specifically through cross-organizational activities ranging from talent development to technology development and technical support. This role includes the provision of materials and technologies as the source of new value, technical support for development processes and mass-production, and technical advice about various issues at other stages of product development.

Creating a Unique Global Soft Drink Business Built on Local Autonomy

In April 2017, the Research & Development Department was created within the MONOZUKURI Division through the merger of the R&D Planning Division, New Product Development Division, and Research & Technology Development Division. We have been developing cooperation among the various regions over the past three years, but I sense that the evolution of trust and communication among group companies has accelerated since last year. This is the result of our newfound ability to offer more comprehensive solutions to each region.

From a product development perspective, we must provide the support necessary for applications to be adapted to local needs, while maintaining respect for local leadership and ownership. We base our activities on the

concept of local autonomy, because we recognize the need to understand regional and national markets when taking products to the commercialization stage.

Recent Achievements Resulting from Global Synergies

One recent success resulting from global synergies is *MayTea*, which was launched in May 2016 in France, where sugar-related issues have become a focus of controversy. *MayTea*'s positioning as a low-sugar premium iced tea has allowed it to rise to the number-two position in the French ready-to-drink (RTD) iced tea market last year, which was only the second year since its launch. The development of *MayTea* was a fundamentally local initiative, but I believe that the Research & Development Department contributed in a number of ways, including evaluation and extraction methods for the tea itself, as well as the assessment of product benefits.

Good Mood, a mixture of fruit extract and purified water produced using a localized version of a Japanese recipe, was launched in Indonesia in March 2017. In the year since the product launch, *Good Mood* has become increasingly popular in the local market.

In Oceania, Frucor Suntory has launched a new line of kombucha beverages named "*Amplify*." These new products were developed in Oceania and are being sold on a small scale as the first step. Because these beverages are fermented using a combination of bacteria and yeast, including lactic acid bacteria, microbial control plays a key role in mass production. As Frucor Suntory executes its market expansion plans, the Research & Development Department is providing our expertise and technical support for continual improvement of quality control and the scale up of mass production.

Advantages in the Global Market

SBF's Promise, *Mizu To Ikiru*, expresses the shared commitment of the entire SBF Group to the protection of the natural environment, and the optimal use of the gifts of nature. Our beverages, which rely on ingredients from nature, offer a variety of benefits. They are delicious and refreshing, and they quench thirst. Some improve concentration, while others help people to relax.

We are aware that consumers are highly selective in their beverage decisions, and our first priority is to supply products that are safe and healthy. We want people around the world to know that SBF products are natural, healthy, reliable, and safe, and that our beverages will contribute to their well-being and their enjoyment of life. Trust is our most valuable asset, and we must never betray our customers' trust in us. I believe that such trust will help to establish SBF as a global company.

Suntory Tennensui

Suntory Tennensui mineral water is originally a blessing from nature, and by definition something that can be enjoyed safely and with peace of mind. Our aim in developing the *Suntory Tennensui* brand is maximize the wonderful benefits of this mineral water and offer high-added-value products to consumers by combining rigorously selected natural ingredients to create new products that will provide great tastes and emotional fulfillment. Natural ingredients have a variety of complex tastes and flavors. By carefully bringing out those tastes and flavors, we can create extremely enjoyable products. However, because these ingredients are natural, it is also extremely difficult to control their compositional consistency. That is the most challenging aspect of our development work. In our R&D activities in Japan, we combine development knowledge accumulated over many years, and our endless commitment to originality and innovation, with science and technology, to create

unique new products for the *Suntory Tennensui* range, such as *Asa-zumi Orange & Tennensui*, *Yogurina & Tennensui*, *PREMIUM MORNING TEA Lemon*, and *PREMIUM MORNING TEA Milk*.

In addition to our efforts to create delicious tastes and flavors, our formula designs are also based on detailed research concerning the mechanisms of the human body. Our aim is to understand why human beings like certain tastes and flavors and want to drink beverages with those. I believe that what we have learned from our R&D work in these areas will increasingly be used in R&D activities throughout the entire SBF Group. Every year, the R&D staff in Japan absorbs new knowledge by exploring consumer trends in other countries. We share that knowledge with our colleagues in overseas SBF Group companies.

We will continue to respond to consumer demands worldwide for natural and healthy products by creating new beverages to be enjoyed by people.



Norihiko Yoshimoto

General Manager
Development and
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Good Mood

With temperatures hovering at tropical levels all year round, it is perhaps unsurprising that the Indonesian beverage market is made up of nearly 50% bottled water. In order to offer something new to those looking to quench their thirst, Suntory Garuda developed *Good Mood*, a clear, fruit infused water. With the product's release in the spring of 2017, the company became a pioneer in the fruit infused water category in Indonesia.

Starting with the same core technology as the SBF Japan's R&D team, but adapting and recreating the recipe to fit a new market and the local Indonesian palate became a chance for unique product development. Indonesian consumers have reacted positively to the concept of infused water, which looks healthy and has an appealing natural taste.

We consulted SBF Japan's R&D department on challenges like creating natural fruit taste, while also learning

about the benefits of osmotic pressure for hydration. The R&D teams faced some challenges but succeeded in capturing the right level of sweetness and acidic citrus taste that Indonesian consumers preferred. The recipe also had to be adjusted to be suitable for the Halal standards of the market. Suntory Garuda launched two flavors: honey lemon and orange. Because Indonesian consumers love sweet citrus, we added honey to the lemon, and chose a sweet orange taste profile.

Having been released only a year ago, the *Good Mood* line is gaining two additional flavors this spring. While the size of the Indonesian beverage market is still small, SBF sees it as a future growth area. Our R&D team is already considering other ways in which they can benefit from SBF's water and hydration know-how to create more innovative and attractive products for their consumers.



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MayTea



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SBF Europe's concept of *MayTea* was in part a response to the general downtrend in the sale of sweet drinks, but also an effort to provide what customers were looking for and could not find on the market. The *MayTea* infusions are authentic, refreshing and natural, with a short ingredient list and no artificial flavorings, colors, or preservatives, and are also very low in sugar.

SBF Japan's R&D helped the local team throughout the developmental process, especially in the area of tea infusion technology, by offering advice on key points like water quality. In addition to flavor adjustments to the French consumers' taste, the R&D teams faced the issue of the product's cloudiness, as particles from the infusion would settle at the bottom of the bottle. Solving that issue was one of the greatest challenges they overcame.

While SBF Europe's R&D received a productive boost from working with Japan R&D, the product remained local

consumer oriented. Essentially, SBF gives local companies control of how they want to use the technological platforms that have been developed. For example, one of the first two flavors that the local team developed was a green tea and mint infusion. This was created specifically to offer an appealing flavor to a large number of French customers familiar with Moroccan and North African tea culture.

MayTea's sales results seem to be solid evidence for the effectiveness of that management style. In two years' time, *MayTea* became the second highest-selling product in the French bottled iced tea market, creating the new category of infused tea, and tripling its sales numbers in three years. After its debut in France, the brand went on sale in Belgium and Spain, with plans to expand in other European countries in the future.

Amplify



Ben Walkley

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After seeing consistent decreased sales of juice drinks as many consumers cut back on their sugar intake, Frucor Suntory decided to explore a completely new product area: kombucha. The fizzy, fermented, non-alcohol tea beverage is one recently trending alternative to sugary beverages. Kombucha's wide range of potential health benefits and a reliance on natural ingredients also made it a good fit for the SBF Group portfolio.

When Frucor Suntory was looking into developing kombucha, there were already local brewers selling their own versions. The small size of these brewers, however, meant there was often a fluctuation in the flavour and quality of the finished drink. Frucor Suntory wanted to create a product that could provide both consistent quality and a less acidic taste for consumers.

The Frucor Suntory R&D team continually finessed the recipe over the course of development to get it just the way they wanted. Kombucha requires fermentation for many days, which is very

different to the other products the company manufactures. Currently, the R&D team is interested in deepening their understanding of the SCOBY, the symbiotic culture of bacteria and yeast, which creates the distinctive taste of kombucha. They will call on the technical assistance of SBF Japan's R&D for the necessary scientific analysis.

The kombucha, under the brand name *Amplify*, is certainly one of the more adventurous products that an SBF Group company has released in the past couple of years. Three flavours of *Amplify* went on sale in Australia in January 2018, and in New Zealand in April 2018. Though it is too early to say whether this will be the start of a strong new segment, there does seem to be a groundswell of interest. By successfully bringing *Amplify* to market, Frucor Suntory's R&D department has also gained the insight needed to potentially assist other SBF Group R&D teams who may be interested in producing kombucha in the future.