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Issue 03

Feature

Small Things That Make It Sweet

Let’s Go Visit the World-Famous, “Fermentation Restaurant.”

Feature

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A to Z on Japanese Food What Are the Important Elements That Should Be Preserved for Future Generations?

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In this article, we will introduce key Japanese foods where fermentation plays a crucial role. Recently, Japanese cuisine has gained global recognition for its eco-friendly practices, utilizing all parts of seasonal ingredients. However, defining Japanese food is complex and varies among chefs and researchers. While sushi and tempura are commonly recognized as Japanese dishes, the inclusion of ramen, now considered Japan's national dish, sparks debate. Moreover, despite the global availability of diverse cuisines in Japan, opportunities to enjoy traditional Japanese food are diminishing. How can we ensure the preservation of this culinary heritage?

We spoke with Mr. Naoyuki Yanagihara, who studied fermented food science at university and now teaches Japanese cuisine at his cooking school. The interview, titled "A to Z on Japanese Food," also highlights dishes served at Tenoshima, a restaurant Mr. Yanagihara endorses as the best place to experience authentic Japanese cuisine.

Interviewee: Naoyuki Yanagihara
Photos: Tohru Yuasa

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What is Japanese food? Historically, the term is not as old as French or Chinese cuisine, and its definition remained vague until it was recognized as an intangible cultural heritage by UNESCO. At one point, there was a movement to register Kyoto cuisine as the representative of Japanese food with UNESCO, but this was rejected as it would favor a specific region. After extensive discussions among experts, the definition of Japanese food was eventually narrowed down to three key elements.

The Evolving Definition of Japanese Food Three Key Points to Understand

The first point is that Japanese cuisine capitalizes on the rich and unique ingredients found in Japan. As an island nation with a long north-south axis and oceans where warm and cold currents collide, Japan boasts a wide variety of fish, with the Toyosu Market consistently offering 150 to 200 varieties. The diversity of vegetables is equally impressive. The concept of "one soup and three dishes" is central to Japanese meals, where three dishes accompany rice and miso soup. These dishes are not categorized as main or side dishes but are an array of items prepared in various ways, such as stewed, baked, steamed, or cooked differently. Typically, about 13 ingredients are used in Japanese food, compared to the average of 7 to 8 kinds used in international cuisine.

A staple of Japanese cuisine, wakame seaweed and bamboo shoots, a "meeting" of sea and mountain products, is garnished with rapeseed blossoms, evoking the essence of spring. (Ryohei Hayashi, owner of Tenoshima)

The second point is that seasonality is a cornerstone of Japanese cuisine. Since ancient times, and particularly during the Edo period, it has been considered stylish to eat seasonal foods as soon as they become available. Unlike French cuisine, which uses rare and luxurious ingredients like foie gras and caviar, Japanese cuisine focuses on the freshness and seasonality of ingredients. For instance, the first bonito of the season, caught off the coast of Kamakura, can fetch several hundred thousand yen. Similarly, tuna is auctioned at high prices during the New Year due to its seasonal significance.

The third point is that Japanese cuisine is renowned for its healthiness. In Japanese cooking, water is mainly used for making broth, boiling ingredients, and for cooking. Fermented seasonings such as soy sauce, miso, mirin, and vinegar are added to it. Overseas, cooking is done in oil and flavored with spices. So when a dish tastes good, it is often described as having a "good flavor." Because Japanese cuisine does not use oil, the original flavor of the ingredients becomes more important.

The cherry anthias is one of the most popular spring fish. This one, from the port of Yaizu, is full of fat and has been storing strength before spawning. (Ryohei Hayashi, owner of Tenoshima)

When I explain Japanese food to foreign chefs, they are often surprised and say, "Only Japanese chefs make this kind of food." Overseas chefs aim to make an impact with bold flavors. For example, in Spain, you can find dishes that are extremely sour from a Japanese point of view, but in their culture, this is considered a positive attribute. On the other hand, Japanese chefs tend to value balance in their dishes. This emphasis on balance likely contributes to the consistently high quality of Japanese restaurants, where the food is delicious no matter which restaurant you visit.

The Unspoken Aesthetics of Japanese Food
The True Nature of the Aesthetics Essential to Japanese Food

However, no matter how much we try to refine the definition of Japanese food, there are still nuances that cannot be verbalized. One such nuance is the Japanese aesthetic sense. For example, are curry and rice or ramen considered Japanese food? Today, Japanese people probably eat these dishes more often than traditional Japanese food. Yet, it feels uncomfortable to label them as Japanese food, even though they are national staples. This distinction is puzzling.

Take the placement of chopsticks, for instance. Most Japanese people would feel uneasy if chopsticks were placed vertically. This discomfort stems from an aesthetic sense. There is an interesting story behind this practice. Chopstick culture was introduced to Japan from China around the time of the Sui dynasty when envoys were sent. At that time, chopsticks were placed horizontally. Later, during the period of the Japanese envoys to the Tang dynasty, the Tang culture placed chopsticks vertically, as they had rejected the previous

era's customs. However, in Japan, the horizontal placement of chopsticks persisted. Thus, something of foreign origin became an integral part of Japanese food culture, giving rise to a unique sense of beauty.

Roasted domyoji is sprinkled on rehydrated domyoji to represent cherry blossoms. The ingredients include salted cherry blossoms, bamboo shoots wrapped in cherry leaves to resemble sakura mochi, fatsia sprouts, and sea bream from Munakata, Kitakyushu. (Ryohei Hayashi, owner of Tenoshima)

The Evolution of Japanese Food in Response to External Influences What is the Unchanging Core?

What exactly is the core of Japanese food? It is rice. If we consider that Japanese people prefer dishes that complement rice, even foreign-origin dishes can become part of Japanese cuisine. Take sukiyaki, introduced during the Meiji period, for example. Few would dispute its status as Japanese cuisine today. Similarly, curry, a relatively recent arrival in Japan, may one day be regarded as quintessential Japanese fare, much like sukiyaki.

White asparagus rice, cooked with asparagus broth. Although the standard length for white asparagus is 24 centimeters, the bottom part, usually discarded, makes a delicious broth. This is a discovery made by visiting the producer. (Ryohei Hayashi, owner of Tenoshima)

No aspect of Japanese cuisine has been untouched by foreign influences, not even tempura. Even rice, traced back to its origins, came from outside Japan. Yet Japan possesses a remarkable ability to assimilate foreign elements and imbue them with its own essence, shaping its unique culinary culture. Rather, this process of adaptation and integration is a defining characteristic of Japanese food.

In my cooking school, I refrain from rigidly defining "how Japanese food should be." Ingredients hail from all corners of the globe, and like chefs of old, I aim to evolve Japanese cuisine by incorporating diverse elements. Japanese cuisine is multifaceted, seamlessly blending ingredients, dishware, and cooking techniques to create a distinct flavor profile. Thus, when presented on a Japanese plate and enjoyed with chopsticks, any dish can take on the mantle of Japanese cuisine. Even if an element seems out of place, there's always a way to harmonize it.

However, when it comes to seasoning with oil, as common in other cuisines, I find it may stray from the essence of Japanese food. My goal is to accentuate the natural flavors of the ingredients. Furthermore, rice must remain central. While I'm open to adapting accompanying dishes to suit contemporary tastes and circumstances, if rice were to disappear, I fear the soul of Japanese cuisine would vanish with it.

Cherry trout caught in Esashi-cho, Hokkaido, grilled using the yuan method (marinated in a mixture of soy sauce, sake, mirin, and citrus juice), with lemons from the Seto Inland Sea. Modern food logistics prevent strong odors, so mirin has been omitted to highlight the fish's natural sweetness. The underlying material is zunda (edamame bean paste), traditionally made with edamame, but green peas are used here for a seasonal touch, providing a varied texture. (Ryohei Hayashi, owner of Tenoshima)

There is no formal school of Japanese cuisine; rather, the tradition has been maintained within households. Simple meals like grilled fish, rice, and miso soup are considered quintessential Japanese dishes. Japanese food enjoyed in restaurants doesn't have to rely on expensive ingredients either. For example, boiling freshly picked spinach, adding roasted sesame seeds, broth, and soy sauce, and serving it on a special plate transforms a basic spinach ohitashi (blanched spinach) into a refined dish through meticulous preparation.

As a recommendation for a Japanese restaurant, I mentioned Tenoshima, run by Ryohei Hayashi, who trained at the esteemed Kikunoi kaiseki restaurant. Tenoshima doesn't depend on high-end ingredients but instead focuses on proper technique and fair pricing. This approach captures the essential spirit of Japanese cuisine that has been cherished in homes.

Japanese Food Culture Has Been Nurtured Through a Long Cycle We Are Now Consciously Preserving It

Japan's cultural history spans over 2000 years, and remarkably, it has never been invaded since its culture began. It is a unique country where culture has continued uninterruptedly under the Emperor system, despite changes in leadership. The Muromachi period saw the birth of the formal beauty of traditional arts like the tea ceremony and flower arrangement, while the Edo period introduced Western culture. During the Meiji Restoration, the Emperor

was served a full course of French cuisine. However, each time foreign cultures influenced Japan, they were interpreted in a distinctly Japanese way, a hallmark of Japanese adaptability. This cycle of adaptation has continued in Japanese cuisine as well.

Today, the fusion of global food cultures is accelerating, leading to a homogenization of tastes. For example, Kyoto and Edo cuisines, which traditionally had different preparation methods, are blending. In modern Tokyo, usukuchi (light) soy sauce is commonly used, and

In the east, the water is hard, while in the west, the water is soft, which may explain the differences in sushi cultures. Edomai rice is ideal for sushi as it hardens when cooked normally. This difference intrigues customers from overseas. (Ryohei Hayashi, owner of Tenoshima)

it is not unusual to find raw tuna in Kyoto, where fermented fish once dominated.
This trend mirrors the presence of family restaurant chains in rural train stations, where uniformity is becoming the norm. Even when dining on French cuisine, Japanese ingredients are often used. Therefore, establishing a foundation or guidelines for preserving the essence of Japanese cuisine is becoming increasingly important.

Until recently, the term “food culture” was absent from Japanese legal texts. However, a few years ago, it was included in the revised Basic Act on Culture and the Arts. Food culture is fluid, evolving with daily life. Thus, documenting the food culture of each era is crucial, even if it doesn’t remain in its original form. What has been naturally preserved until now must be consciously passed on in the future. I hope the Japanese Pavilion at the EXPO can serve as a catalyst for this effort.

Seasonal ingredients used at Tenoshima (the interview took place in early April). Hayashi, the owner, visits local areas to talk directly with producers, discovering the unique charm of "as-is" ingredients, which are not standardized and often have parts that are typically discarded. (Ryohei Hayashi, owner of Tenoshima)

Tenoshima
The restaurant Tenoshima was opened in March 2018 by Ryohei Hayashi, who trained at the renowned ryotei restaurant Kikunoi in Kyoto, and proprietress Sari Hayashi, a graphic designer turned Japanese chef who previously ran a Japanese restaurant in Northern Europe. The restaurant is named after Teshima, a remote island in Kagawa Prefecture, where Hayashi's original home is located. Emphasizing the concept of "Japanese food for everyone," Tenoshima was awarded a star in the Michelin Guide Tokyo in 2023.
Minami-aoyama 1-55 Building 2F, 1-3-21 Minami-aoyama, Minato-ku, Tokyo
☎+81-3-6316-2150

Cooking Specialist

Naoyuki Yanagihara

Born in Tokyo in 1979, Yanagihara studied fermented food science at Tokyo University of Agriculture. He gained experience working for a soy sauce company in Shodoshima and as a kitchen crew member on a Dutch sailing ship. Currently, he teaches Japanese cuisine and cha-kaiseki at Yanagihara Cooking School in Akasaka, Tokyo. Yanagihara has appeared on NHK's "Kyo no Ryori (Today's Menu)" and other TV programs, and has supervised cooking and historical research for historical dramas. In 2015, he was appointed as a Japan Cultural Envoy by the Agency for Cultural Affairs, and in 2018, he was named a Goodwill Ambassador for Japanese Cuisine by the Ministry of Agriculture, Forestry and Fisheries.

Why Is Soy Sauce Good? Exploring Japanese Fermentation Culture Through Seasonings

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Soy sauce, miso, natto, sake, and other fermented foods are indispensable to our dining tables.
With its rich culture of fermented foods, Japan is now recognized as a "fermentation superpower," attracting global attention.
While fermented foods are found all over the world, no other country has produced such a wide variety of fermented seasonings as Japan. Dr. Kenji Maehashi, a leading researcher on fermented seasonings in Japan and a professor in the Department of Fermentation Science at the Tokyo University of Agriculture, highlights this unique diversity.
How did the complex and rich flavors, produced from minimal ingredients, along with their wonderful health benefits, come about?
We invite you to explore and taste the amazing power of fermented seasonings, the pride of Japan.

The Decomposition Power of Koji Rice Supports Japan, the Fermentation Superpower

—— Japan is often referred to as a fermentation superpower due to its rich variety of fermented foods. How do Japanese fermented foods compare to those from other countries?

Maehashi Natto (fermented soybeans) and pickles have long been staples in Japan. In terms of seasonings, Japan offers a remarkable variety, including miso, soy sauce, mirin, and different types of vinegar. Additionally, Japan produces a range of alcoholic beverages such as sake and shochu, along with non-alcoholic options like amazake. These fermented products can be broadly classified into four categories: seasonings, foods, alcoholic beverages, and non-alcoholic beverages.
Globally, major fermented foods include cheese, yogurt, sausages, aged meats, and fermented fish. Fermentation originally served as a method for preserving food, leading to a wide array of fermented products worldwide. Alcoholic beverages, which naturally result from the fermentation of sugars, are found in nearly every culture. Vinegar is also a global staple. However, Japan distinguishes itself with the greatest variety of fermented seasonings, making it unique in its culinary offerings.

—— You mentioned that fermented foods exist globally, but are there any regions in the world where they are not consumed?

Maehashi No, I don't believe there is any place in the world where people don't consume fermented foods. Fermentation is both a natural phenomenon and a traditional processing technique. While modern science and technology might allow for a diet without fermented foods today, it is unlikely that people in the past could have avoided them entirely as stored foods naturally undergo fermentation.

—— What are the differences in seasonings between Japan and other countries?

Maehashi Generally speaking, when we think of seasonings, salt, sugar, and spices are the most common. Although not typically classified as seasonings, sauces play a crucial role in French cuisine, where they create flavor by blending broths from various ingredients—a rational approach to enhancing deliciousness.

In contrast, seasonings are the foundation of Japanese cuisine. Soy sauce and miso, made from rice, wheat, or soybeans, derive their flavor through fermentation. Japanese fermentation technology excels at creating complex flavors from minimal ingredients, eliminating the need for blending. This is a distinctive feature of Japanese culinary practice.
Fermented seasonings significantly influence Japanese food culture. Japanese cuisine, known for its simplicity, achieves complexity through these seasonings. Unlike Western cuisine, which layers flavors, Japanese food develops depth by breaking down simple ingredients into more intricate tastes. This fundamental difference underscores the distinctive approach to seasoning in Japanese cuisine.

—— Unlike food products, there aren't many countries, aside from Japan, that boast an abundance of fermented seasonings, you say?

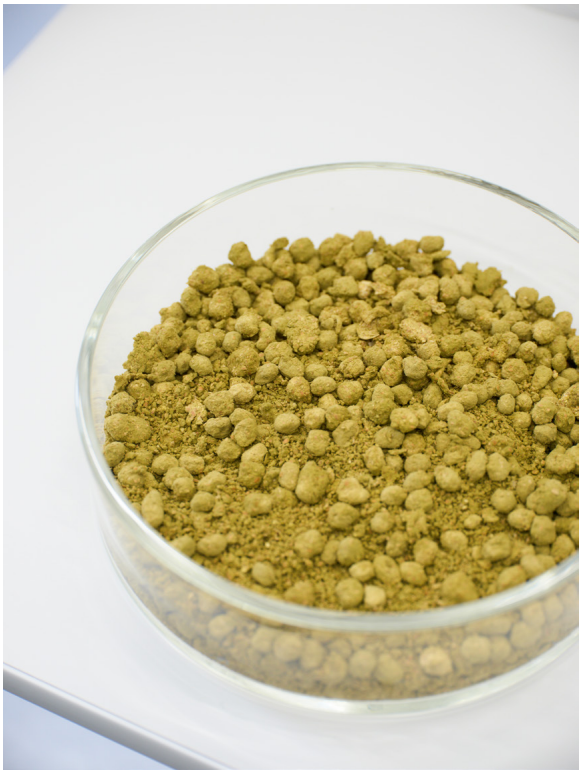
Maehashi In many countries, you'll find grain-based beverages like alcohol and dairy products like yogurt, but fermented seasonings are a rarity. Vinegar stands as the exception, being popular in nearly every corner of the globe. Where there's alcohol, there's almost always vinegar.
While fermented seasonings also have deep roots in the food cultures of Asian countries, the variety found elsewhere pales in comparison to Japan's rich assortment. It's a rarity to encounter the same breadth of flavors as those

produced in Japan.
This discrepancy arises because yeast and lactic acid bacteria are the primary agents of fermentation worldwide. Given their natural occurrence, they're commonly utilized. Fermented foods using these agents can be found globally.

Take, for instance, Marmite, a beloved seasoning in the United Kingdom and New Zealand. It's crafted from yeast byproduct during beer brewing, imparting a distinctively salty flavor often enjoyed with toasts.

Maehashi

In addition to yeast and lactic acid bacteria, Japanese fermented foods frequently employ koji mold. While originating in China, the Japanese have refined and perfected koji cultivation. Miso, soy sauce, sake, and vinegar in Japan are all products of koji.
One of the remarkable traits of koji is its decomposing prowess. It breaks down ingredients both horizontally and vertically, enhancing complexity. Japanese brewing pioneers recognized koji's flavor-enhancing abilities long before the concept of microorganisms emerged.



Koji rice prepared by Dr. Maehashi in his laboratory.

— When was the mechanism of fermentation discovered?

Maehashi The mechanism of fermentation was first discovered overseas in 1860, marking a pivotal moment in our understanding of this process. In Japan, the concept of an invisible force at work was initially inconceivable. However, with the arrival of foreign researchers around the beginning of the Meiji period, the existence of koji mold was revealed, spurring advancements in research.

Prior to this revelation, sake brewing faced challenges from sake spoilage by hiochi, a type of lactic acid bacteria that caused souring. Given sake's significance as a source of tax revenue, foreign researchers were brought in, and nationwide efforts were made to enhance sake production. This collaborative endeavor led to significant improvements in sake brewing technology, laying the foundation for modern sake production techniques.

Historically, vinegar production was a straightforward process: "Put rice, koji, and water in a jar, and it will naturally ferment into sake, eventually turning into vinegar." However, the quality of vinegar we enjoy today cannot be achieved through such simplistic means. The refinement of vinegar production occurred with the development of technology to cultivate acetic acid bacteria successfully within sake.

The techniques used in the production of sake and fermented seasonings as we know them today were established from the late Edo period to the early Meiji period.

Dr. Maehashi crafted vinegar using the traditional method outlined in "Honchoshokkan," a comprehensive tome on Edo-period cuisine. The resulting vinegar is notably more acidic compared to modern varieties.

Japanese Soy Sauce Is Respected Around the World

— What effects in flavor does fermentation with koji mold create?

Maehashi Koji mold is the starting point for making soy sauce, enhancing both its flavor and aroma to create a complex and elegant profile. Foreign soy sauces, which are often less fermented, still have umami but tend to be saltier and less aromatic. The rich aroma of Japanese soy sauce results from thorough yeast fermentation.
While it may be an extreme example, there is a soy sauce made in Hawaii known as Aloha Soy Sauce.

Compared to Japanese soy sauce, Aloha Soy Sauce has a stronger aroma and a saltier taste profile.

Maehashi Soy sauce consumed abroad is typically thick and salty. In contrast, Japanese soy sauce contains a high amount of amino acids and glutamic acid, thanks to the action of koji mold, which gives it a pleasant aroma. Lactic acid bacteria also contribute to the flavor, resulting in a robust taste that is not merely salty. Nowhere else in the world is soy sauce made with such sophistication as in Japan.

Since the advent of koikuchi soy sauce (the most common type) in the Edo period, leading Japanese soy sauce makers have continuously refined their processes to create a superior product. They have meticulously studied every aspect of soy sauce production, from the optimal boiling time for soybeans to the precise amount of koji to add, all in the pursuit of the best taste.

Interestingly, there is a theory that Worcestershire sauce in the West was inspired by Japanese soy sauce. It is said that people remarked, "There is a black, delicious liquid in Japan," and attempted to recreate it, resulting in Worcestershire sauce. Come to think of it, naturally boiled sauces would not achieve that same color.

— Soy sauce and vinegar are available in other countries, but what about miso?

Maehashi Miso was originally introduced from China, making it readily available there. It's also commonly found in Korea and Taiwan, but not prevalent in the West. Originally, hishio, salted soybeans from China, served as the precursor to Japanese miso. It was through this lineage that Japanese miso, utilizing koji rice, was born. While China primarily used koji barley and beans, in Japan, miso emerged with koji rice, eventually becoming the standard across all miso varieties. In this regard, it's fair to credit Japan as the birthplace of miso.

In Japan, only purified koji mold spores are utilized to cultivate clean koji mold. This process is a testament to Japan's unique technological advancements in koji production.

Hawaiian miso. Known for its pronounced saltiness, as expected.

We Don't Know Why It's Good for Your Health: The Mystery of Fermentation

— When did the technology become established?

Maehashi The use of koji rice in sake production dates back to the Heian period, so it must have been established around that time. One theory suggests that mold grew on rice used for offerings, leading to the development of koji.
In China, koji was traditionally grown on rice in the form of dumplings, whereas in Japan, koji is grown on individual grains of rice. Interestingly, the type of mold that develops differs between these forms. Eventually, this process became an established technology, giving rise to advanced brewing techniques.

— Considering that fermented foods were produced at a time when the existence of microorganisms was unknown, was it accidental?

Maehashi Perhaps, but we don't know for sure. There is a story that "mold grew out of an offering and they happened to find it," but it's unclear if that is true. Eating mold is still a risky proposition. The global standard is that mold is poisonous, yet Japanese people have been consuming mold since ancient times, even without knowing its potential dangers.

—— It is a wonder why they ate it.

Maehashi It likely happened naturally; people discovered that certain molds were safe to eat and didn't cause illness. This trial-and-error approach would have led to the acceptance of these molds in their diet. The fact that it tasted good and didn't upset their stomachs probably reinforced its use.

—— Fermented foods are generally said to be good for health, but is the same true for seasonings?

Maehashi Even before fermentation, soybeans are a nutritious food, often called "the meat of the field" due to their high protein content. Soybeans have various health benefits, such as lowering cholesterol, inhibiting cancer, and reducing blood pressure.

Since the Edo period, it has been said that "miso is indispensable." Essentially, miso can be seen as a way to ferment soybeans to enhance their taste, allowing soybeans to be used in a variety of dishes.

However, most of the health benefits of fermented seasonings are known empirically rather than scientifically. Despite the complexity and numerous ingredients in fermented seasonings, not many health-specific substances unique to these products have been identified. Therefore, we can only make a general assessment of the health benefits of miso and soy sauce.

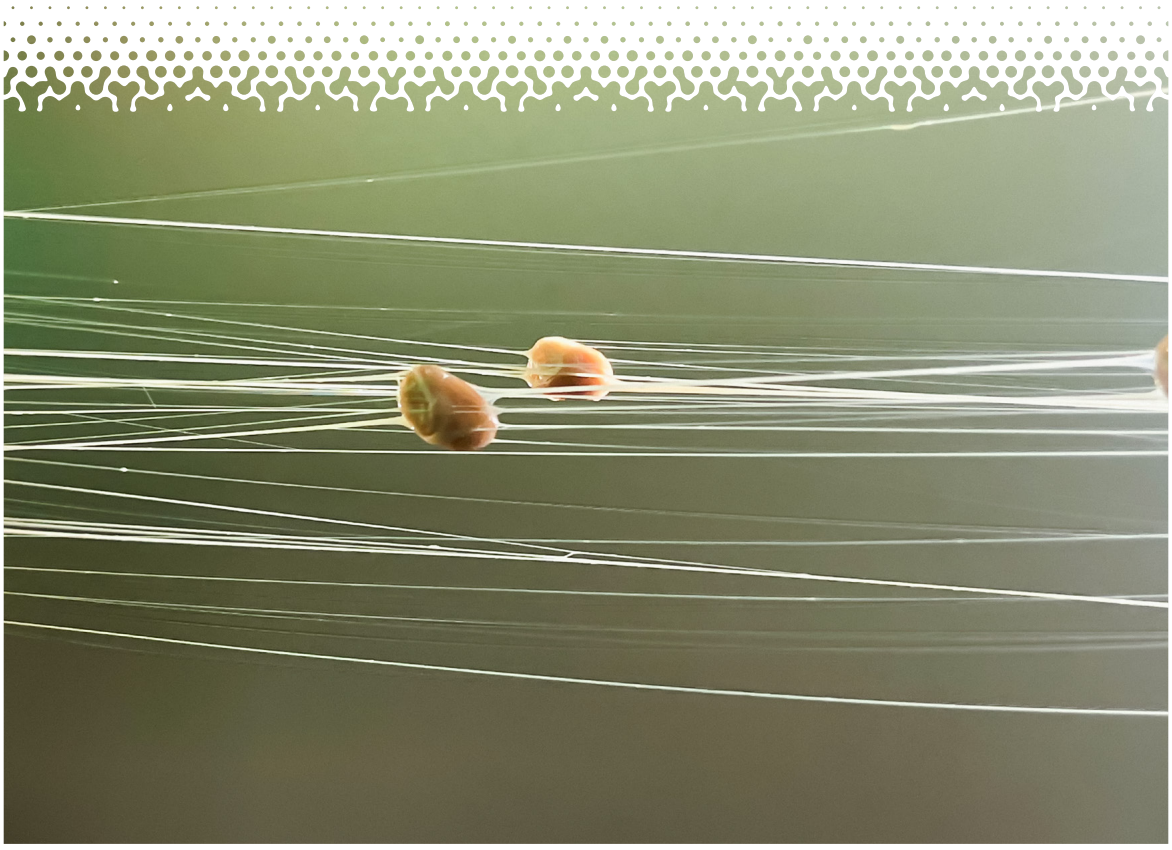
—— We don't know exactly what is working, but we know it is healthy. It's a mystery. It's quite perplexing, isn't it?

Maehashi We can't determine it chemically, but the most likely explanation is the presence of beneficial bacteria, a key characteristic of fermented foods. Humans have a large amount of intestinal bacteria and live symbiotically with them. By improving the intestinal environment, immunity is increased. It's reasonable to assume that consuming fermented foods helps enhance the intestinal environment.

As a defense mechanism, the human body can recognize foreign substances and adjust itself accordingly, whether it's pollen, dust, or bacteria. Cells recognize these elements and strengthen the immune system. Conversely, when the immune system is weakened, various diseases, such as allergies and hay fever, can arise. Consuming fermented foods introduces a variety of beneficial bacteria into the body, helping to maintain a strong immune system. Overall health maintenance is the primary benefit of fermented foods, and this likely involves immune system support.

Current technology hasn't fully caught up with the health benefits of fermented seasonings, so I hope to clarify these effects through future research.

The Beauty of Microbial Creation: Welcome to the Museum of Fermented Foods by Kaoru, Founder of Dress the Food



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What comes to mind when you think of fermented foods? Most would say they are healthy, rich in umami, and flavorful. But what about their visual appeal? We often focus on the taste and aroma of fermented foods, yet a closer inspection reveals a stunning world of microorganisms at work.

Consider natto (fermented soybeans), amazake (sweet sake), and dried bonito flakes. Food director KAORU captures the vibrant beauty of these three familiar fermented foods through photos and captions, highlighting the dynamic world of microorganisms involved in their creation.

Welcome to the Museum of Fermented Foods, where the unique beauty and vitality of fermented foods come to life. Experience the allure that goes beyond taste and aroma, inviting you to appreciate the fascinating microbial artistry behind these culinary delights.

Natto: Unity and Dynamism

Natto, or fermented soybeans, is one of Japan's most beloved fermented foods. Its origins are shrouded in various legends, such as the story of Hachimantaro Yoshiie (Minamoto no Yoshiie) during the late Heian period. A tale of his suggests that natto was born when stewed soybeans, carried on a horse's back, came into contact with Bacillus subtilis natto* present in the straw of the bale. Regardless of the specific origin, natto's creation is often attributed to a fortunate encounter with these bacteria.

Bacillus subtilis natto is a resilient bacterium, capable of surviving not only in straw but even 3,000 meters above ground. This microorganism is renowned for supporting health, particularly through the production of the enzyme nattokinase, which helps dissolve blood clots.

There are four main types of natto: itohiki (sticky) natto, hikiwari (crushed) natto, goto natto (hikiwari natto fermented with koji rice and salt), and tera natto (soybeans fermented with roasted and ground barley powder). Food director KAORU examined the three types of natto that utilize Bacillus subtilis natto, noting that the soybeans maintain a perfect distance from each other during fermentation.

*Though Bacillus subtilis natto is not recognized as a distinct species academically, it is part of the broader Bacillus subtilis group of microorganisms.

01: "Dwell" From a sanitation perspective, modern straw natto is typically made by inserting natto produced with artificially pure-cultured Bacillus subtilis natto into the straw. However, my observation focused on a primitive method using natural Bacillus subtilis natto directly in the straw. The aroma from the straw and the living bacteria within it creates a mellow fragrance that invites you to keep inhaling its scent.

02: "Untie" Straw natto is quite large, about 30 meters long, and tied at the top, bottom, and center with strings. To extract the natto, you only need to untie the middle string and push from both ends. The natto emerges in a single lump. Surprisingly, it does not cling to the straw but stands firmly on its own.

03: "Dance" When kneading natto, you'll notice how quickly its sticky threads break off. Typically, when you casually eat natto, it seems to have many threads, but in reality, these threads have a fleeting presence, disappearing almost instantly.

04: "Pull Each Other" Hikiwari natto, a type of itohiki natto, involves splitting the soybeans and removing their skins. Chopped as finely as rice, it forms a uniform mixture that pairs well with white rice. When laid out flat, the beans appear to move acrobatically, in solidarity with one another.

05: "Unite" Why isn't natto commonly used in onigiri (rice balls)? Goto natto, a long-standing preserved food in Yonezawa, Yamagata Prefecture, meets all the criteria to be a perfect onigiri filling. It's not very sticky, allowing it to be scooped in chunks with a spoon. Fermented and aged with koji rice and salt, it is well-seasoned. When placed on a plate, its presence as a cohesive lump stands out.

Amazake: Seven Transformations of Rice

There are two types of amazake (sweet sake): one made with koji rice** and the other with sake kasu (lees). Koji amazake is a simple combination of rice, koji rice, and water, while sake kasu amazake is made from sake kasu, sugar, and water.

KAORU chose koji amazake, made without heating to preserve the live koji yeast, and sake kasu from Japanese sake, a key ingredient for sake kasu amazake.

The journey of rice: from rice to koji rice, and then to koji amazake; from rice to sake, and then to sake kasu amazake. Rice, the soul of the Japanese people, undergoes multiple transformations to become a naturally sweet liquid.

**Koji rice is created by propagating and fermenting Aspergillus oryzae, a koji mold, on rice. This mold has a high capacity for converting rice into sugar. Koji rice is fundamental to Japanese cuisine, used in making miso, soy sauce, and mirin.

06: "Stagnate" From deep within the liquid, the flavor of koji rice rises, enveloping your senses. While koji rice is often used in everyday cooking, its aroma diminishes when heated. Experiencing the fragrance of unheated, living rice koji is refreshing and distinct.

07: “Decay” The rice used as the raw material can be seen in the decomposition stage. The visual of its original shape decaying imparts a sense of Japanese beauty, reflecting the natural process of transformation.

08: "Settled" Opening the sake kasu reveals a rich aroma of alcohol, instantly evoking the image of an elegant Japanese dish. Once made into a sheet and folded, the sake kasu is as solid as clay, presenting a strong and cool appearance.

Dried Bonito Flakes: Meat or Bark?

The term “bushi” in katsuobushi refers to fish that has been boiled and then smoked (heated and dried) to preserve it. After multiple smoking processes, katsuobushi mold develops. Why is there no fat floating in the broth despite bonito being an animal product? The answer lies in the mold. Katsuobushi mold decomposes lipids and performs remarkable functions, such as gradually removing moisture for long-term preservation and enhancing umami and deep aroma***.

Many other types of “bushi” exist, including mackerel, tuna, and horse mackerel. The flavor and aroma of the fish vary depending on the presence or absence of bloodlines—the area between the fish’s back and belly where many blood vessels are concentrated.

***Not all dried bonito flakes are fermented foods. Those in the stage before mold attachment are called arabushi or onibushi. The bushi with mold attached is called karebushi, and those that have mold attached four times are known as honkarebushi.

09: “Flutter” Dried bonito flakes without bloodlines are a beautiful light color with a sense of transparency, free of reddish-brown parts. They are shaved so thinly that they appear as if they might flutter, resembling delicate ribbons.

10: "Layered" Dried bonito flakes with bloodlines display layers of reddish-brown lines. Compared to those without bloodlines, their taste has more richness and depth, offering a full-bodied flavor profile.

11: "Clear" When you make broth with dried tuna flakes, it has a more refined taste than broth made with dried bonito flakes, with less of a fishy smell. The broth has a yellowish tinge. Depending on the type of bushi, the taste, aroma, and color of the broth can vary significantly.

12: “Betray” Thickly shaved dried bonito have a stunning, meaty appearance, yet they also resemble tree bark or fossils. The exterior has a rough texture, while the interior is glossy. Each piece has a unique look, giving them an artistic quality.

01, 02, 03: Ginjo Natto Fuku Fuku (Fukuda Co., Ltd.)
04: Tokachi no Ibuki - Hikiwari (Tokiwa Shokuhin Co., Ltd.)
05: Yukiwari Natto (Yukinco Inc.)
06, 07: Myojin Amazake no Moto - Nama (Amanoya)
08: Gangi Junmai Daiginjo Yunagi - Shin Sake Kasu (Yaoshin Shuzo Co., Ltd.)
09, 11: Magurohana (Maruyo Co., Ltd.)
10: Hanamejika (Maruyo Co., Ltd.)
12: Sodabushi Atsukezuri (Maruyo Co., Ltd.)

Food Director/Artist

KAORU

KAORU is a food director, artist, and founder of “Dress the Food.” She has worked extensively in advertising, magazines, and commercials. In 2018, she gained attention with her solo exhibition “Food On A Photograph” in New York and Tokyo. In 2019, KAORU held the exhibition “Food On A Model.” In 2022, she launched “shichimi magazine” and is currently working on Vol. 2.

Website: https://www.hanabi-inc.net/people/kaoru
shichimi magazine: https://www.instagram.com/shichimimagazine