

Procédé de fabrication

Manufacturing process

Retour à quai après 3 semaines en mer Return to port after 3 weeks at sea.

La mer fût généreuse les bonites arrivent à bon port The sea was generous, the skipjacks reach their destination safely.

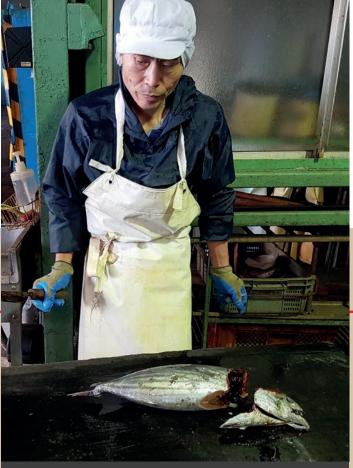






Une découpe traditionnelle (« Namagiri ») avec des gestes assurés
A traditional cut ("Namagiri")
with confident movements.







Procédé de fabrication Manufacturing process

En cuisson (« Shajuku ») les filets sont bouillis During cooking ("Shajuku"), the fillets are boiled. Le nettoyage (« Honenuki ») avec des artisans rigoureux Cleaning ("Honenuki"), with rigorous craftsmen.



La fumaison (« Baikan ») et un produit 100% bonite Smoking ("Baikan"), and a 100% skipjack tuna product.





Stockage correct nécessaire à la préservation du goût

Quand on achète du « Katsuobushi » et qu'on veut le garder longtemps, on doit prendre la précaution de le protéger du moisi (différent de la moisissure bénéfique) et des insectes. Le « Katsuobushi » doit être conservé au réfrigérateur dans un emballage hermétique sous vide.

Quand on achète du « Kezuribushi » (=fins copeaux de « Katsuobushi ») et que le sachet a été ouvert, il faut le refermer hermétiquement en faisant le vide d'air et le mettre au réfrigérateur. Si le sachet est petit, il est recommandé de le consommer en entier en une seule fois.

Le problème c'est que si on garde du « Katsuobushi » ou un sachet de « Kezuribushi » ouvert, le « Katsuobushi » va s'oxyder au contact de l'air et son arôme va se détériorer. Il faut y veiller!

Correct storage necessary to preserve the taste

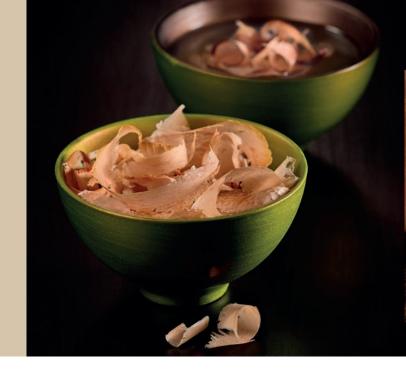
When you buy some "katsuobushi" and you want to keep it for a long time, you must protect it from mildew (different from beneficial mould) and insects. The "katsuobushi" must be stored in the refrigerator in an airtight vacuum package.

When you buy "Kezuribushi" (= fine "katsuobushi" shavings) and the bag has been opened, it must be hermetically sealed by vacuuming it and put in the refrigerator. If the bag is small, it is recommended to consume the whole bag at once.

The problem is that if you keep "katsuobushi" or a bag of "Kezuribushi" open, the "katsuobushi" will oxidize on contact with the air and its aroma will deteriorate. One must pay attention to it!

Ingredient constituting the essence of Japanese cuisine, necessary for the preparation of dashi broth. Katsuobushi contributes to the creation of the famous 5th Umami flavour (literally "savoury taste" in Japanese).

Exclusivity, for the first time in Europe



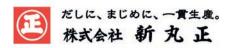






What is "katsuobushi"?

"Katsuobushi" is the common name for smoked and dried skipiack tuna. Katsuobushi has several by-products with different names, depending on the steps and degree of the production process. The skipiack tuna (Katsuwonus pelamis) that has been boiled, smoked and dried is known as "arabushi". When the surface of the "arabushi" is shaved and cut to improve its shape, it is called "hadakabushi". If a mould (fungus) is then grown on the "hadakabushi", twice or more, it is called "karebushi". The general term that includes all these products is "katsuobushi".



Did you know that?

Since December 2013, "Washoku" or traditional Japanese cuisine has been part of UNESCO's Intangible Cultural Heritage of Humanity. This news was welcomed with joy in Japan.

What pops into your mind when you hear about "Washoku", or Japanese food? Things like "sushi", "sukiyaki", "tempura", "soba", and "udon" maybe. It is also possible that a dish you are used to eating is an arranged version of Japanese food consumed in your country after it has been adapted to the local taste.

Today, "Washoku", the traditional Japanese food, is appreciated all over the world. Undoubtedly, the secret of the "Washoku" taste is the "dashi" (which means soup broth). The "Dashi" is the basis of the "Washoku". Western cuisine has its own "broth" or "stock".

The "Washoku" equivalent is "dashi" (soup broth) prepared with ingredients such as "katsuobushi" (smoked and dried skipjack tuna) and "kombu" (dried seaweed). Today everyone can consume a wide choice of food from all over the world and is confronted with a multitude of information on a wide variety of products. Therefore, by promoting the "Washoku", Japan has the duty to provide accurate information on the "dashi" used in the "Washoku" and on its taste. The basis of "Washoku" is "dashi" and the most popular type of "dashi" is "katsuobushi dashi" ("dashi" made with "katsuobushi").

For centuries, and up to the present day, the Japanese have developed their unique culinary culture around fish, in particular "katsuobushi", made by simmering skipjack tuna in hot water, then smoking and drying it.

It has long been the preferred ingredient of Japanese people, due to its delicious taste and good preservation.



"Katsuobushi" and "Katsuobushi dashi": why do Japanese people like them?

Japan is an island blessed with an abundant natural environment. The Japanese people developed mainly as peasants working the land and harvesting the fruits of mountains, rivers and the ocean.

They have become great lovers of a wide variety of fish and shellfish, a vital source of protein.

During this history of the development of culinary culture, the Japanese have shaped and transformed their way of consuming fish, from the wide variety of preparation methods such as grilling or stewing, to a wide range of products such as dried fish and fish paste. During this historical process, the Japanese tried various methods of using "katsuobushi" to prepare "dashi", and "katsuobushi" became the key ingredient for "dashi".

What is thought to be the early form of "katsuobushi" is mentioned in Japan's oldest historical chronicle, the "Kojiki" (Chronicle of Ancient Facts) of the year 712. At that time, "katsuobushi" was a valuable commodity used to pay taxes in kind because it was known for its long shelf life. However, its production method was probably very simple at the time; merely simmered in hot water and then dried in the sun.

Later, in the "Samurai" era, it is reported that "Samurai" soldiers took and ate the "katsuobushi" as it was. It was their ration on the battlefield. Around 1600, there was a change in the method of production of

"katsuobushi". Traditional sun drying was replaced by wood-fired smoking, a process that corresponds to what is now called "arabushi". Then, around 1800, it is thought that the technique of producing "karebushi" appeared when it was discovered that growing a Eurotium fungus on "arabushi" improved its taste. This is how "katsuobushi" became the unique Japanese ingredient.

Become an essential classic ingredient for "dashi" used in Japanese cuisine, "katsuobushi" played an important role in the development of many local varieties of cuisine that appeared during the flourishing "Edo" period (1600-1868). Moreover, culturally, it was used as an offering to the gods. As a result, it was considered an auspicious gift and a wedding present, thus becoming an integral part of Japanese life and customs.

«Katsuobushi» and «Umami»

Just like sweet, salty, sour and bitter, the fifth category of taste is "Umami", which Japanese scientists were the first to identify in the world. Today the "Umami" is widely recognized as a standard taste in the world.

Glutamic acid, an amino acid substance classified as "Umami", was discovered in the "kombu" (dried seaweed) in 1903; then inosinic acid, a nucleotide acid substance classified as "Umami", was identified in the "katsuobushi" in 1913; both of them by Japanese scientists. In 1960 it was discovered that "awase dashi" (mixed

"dashi"), made from a mixture of "katsuobushi" and "kombu" (dried seaweed), further intensified the "Umami" by the interaction of the inosinic acid contained in the "katsuobushi" with the glutamic acid contained in "kombu". It is now known that the full use of this powerful "Umami" can improve the taste of food even with little salt. Thus one of the reasons for the Japanese preference for "katsuobushi dashi" has been scientifically verified.

SHINMARUSHO, based in Yaizu, Shizuoka Prefecture, created in 1935, produces 400 tonnes of katsuobushi and employs some 100 people. The company operates in a non-industrial way and continues to produce its traditional katsuobushi in an artisanal way.

Tokuya KUNO, President of SHINMARUSHO Accreditation for the European Union, a project from the new generation



Tokuya KUNO, 3rd generation, takes over the management of SHINMARUSHO

Succeeding his father in the early 2000s. In 2008, at the request of Olivier DERENNE, founder of NISHIKIDÔRI, he began implementing a HACCP approach in his production workshop.

This approach is a real revolution in a field as traditional as the craft of "katsuobushi" because it involves a rethinking of manufacturing processes from raw material fishing (skipjack tuna) to its marketing.

HACCP certification is mandatory for the export of seafood products to Europe. HACCP accreditation certifies the entire control of the various stages in terms of food risk management, traceability, hygiene, processing operations, food suitability... and therefore more precisely in terms of compliance with European legislation on food products.

The certification process is long and complicated and has been a real challenge for the Tokuya KUNO family, even becoming a professional life project.

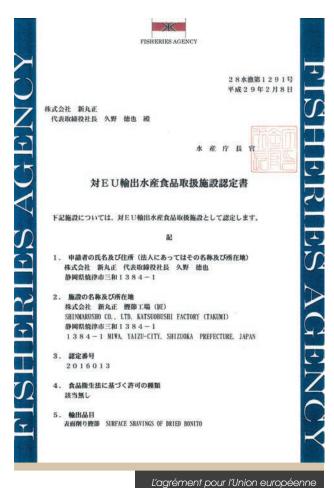
In this family, only the best has its place. "Katsuobushi" has been prepared in the traditional way for several generations and satisfies the most demanding customers. Indeed, Yaizu is one of Japan's two most famous origins for "katsuobushi".

It should be remembered that Tokuya KUNO has proved to be innovative in an area where culture and tradition are kings. The challenge was enormous because "katsuobushi", as it exists in Japan, cannot be exported to the European Union for two main reasons:

Benzopyrene residues are well above European tolerances (proven health impact) and the addition of mould of Eurotium's kind (mould used to reduce moisture and fat in katsuobushi to increase its consumption time) used in the final phase of the manufacturing process is prohibited in the European Union.

Restoring the smoky notes as they exist in the product consumed in Japan is therefore not possible and providing the taste notes and "Umami" becomes a master craftsman's work.

Failure to control this new way of manufacturing "katsuobushi" in accordance with EU standards would condemn "katsuobushi" to vulgar notes of canned tuna.



SHINMARUSHO

SHINMARUSHO has developed, in parallel with its traditional production lines, an ultra-modern and standardized HACCP process for making YAIZU's "katsuobushi".

- The skipjack tuna used is of the "katsuwonus pelamis" type and is mainly fished on the Micronesia archipelago.
 - Fishing takes place throughout the year but the best fishes are those that are low in fat, unlike those used for "sashimi". The "katsuobushi" manufacturer is looking for fish that look nice and well proportioned.
- The skipjack tuna is currently fished by only two vessels recently HACCP certified and is frozen on board and landed at the port of Yaizu, the only HACCP certified port because the sorting and unloading equipment is also HACCP certified. Skipjack tuna is delivered whole, full, frozen, calibrated, to SHINMARUSHO.
- The skipjack tuna is then thawed. After this, it must be fully processed on the same day, which is a request from the Ministry in Japan to meet HACCP standards.
- The head is removed and then offal ("Namagiri" stage), after that the fillets are lifted following the edges to keep them intact. This method is characteristic of Yaizu and Shizuoka.
- The fillets are immersed in cooking basins, containing water, never boiling, for 100 minutes ("Shajuku" stage). The cooking temperature is a trade secret. The water is not shivering, it would alter the flesh. The "shajuku" process deactivates enzymes in the flesh, prevents decomposition, and coagulates proteins.
- Then the fillets are cleaned, prepar ed, all bones and scales or fin residues removed, the meat defatted ("Honenuki" stage). These fillets, always soft, are called "namabushi". This series of processes, from the heading and gutting of the skipjack tuna to the "namabushi" condition, must be carried out on the same day.
- The fillets are then dried several times using secret technical processes different from those used for traditional "katsuobushi", the latter going through different smoking stages.
- These hidden, unique processes will transform "namabushi" into "arabushi".
- Once dried, the "Arabushi" are firm and their fatty surface is shaved down to a regular, smooth and homogeneous appearance. They then become "Hadakabushi". The Japanese authorities will only allow the export of "katsuobushi" in their "Hadakabushi" form. The coating of Eurotium yeast to transform it into "Honkarebushi", the most famous form of "katsuobushi", is prohibited by the European Union.

Our "Hadakabushi" is a living product that continues to mature. The technique used by SHINMARUSHO allows the breakdown of the proteins in their "katsuobushi", thus guaranteeing a high level of inosinic acid and glutamic acid that generate "Umami" and other vitamins. A skipjack tuna of excellent quality, frozen on board, from a recent fishery, will have inosinic acid levels of 400 to 800mg per 100g of skipjack tuna. The result is subtle. The taste and aromatic notes are fine, elegant, the "Umami" very present. The product is healthy, good, beautiful, aesthetic, shiny, gourmand, fragrant.

Katsuobushi is commercialized in quarters of fillets, the skipjack tuna having two fillets, each composed of a dorsal part, "obushi ", and a lateral stomach part," mebushi ".

A skipjack tuna therefore provides 4 units of katsuobushi.

Market demand is strong under the presentation of shavings, but the Japanese authorities currently only allow the export of blocks, i.e. whole quarters. Purists prefer these whole pieces which they can cut into shavings of different thicknesses using the traditional katsuobushi grater.



What are the qualities of the "katsuobushi" block compared to ready-made shavings?

Whole katsuobushi preserves its flavours and ages very well if stored in a dark and dry place. After each use, it is recommended to wrap it in cling film, then vacuum-pack it (for professionals) or in a well sealed container, then place it in the refrigerator, at an ideal temperature not exceeding $+5^{\circ}$ C.

Katsuobushi' delivered in shavings loses its flavour very quickly if it is not consumed within a very short period of time and if it has not been packaged with added nitrogen in its packaging. It quickly tarnishes and its aromas fade.

Taste notes rapidly become unpleasant. The shavings must therefore be used within 8-10 days after preparation. The use of nitrogen in the packaging allows a superior conservation of about 3 to 6 months. It should be noted, however, that packaging over 500g is to be avoided as it does not guarantee optimum organoleptic qualities.

It should be kept in mind that only a freshly grated or laminated "katsuobushi" reveals and preserves all its aromas.

Does the production intended for export have the same organoleptic qualities as that dedicated to the Japanese national market?

The product is different because the smoky notes are much less pronounced. The product is finer, more subtle, more elegant, less acidic. However, it is perfectly recognized by many Japanese chefs, who are very surprised by the obtained result.

The product is healthier because it is not saturated with benzopyrene residues or covered with Eurotium mould.

In Western cuisine, its use will be easier because the smoky and powerful notes of skipjack tuna are replaced by more delicate accents accessible to all.

Is it a product that is logistically constraining?

The Japanese "Katsuobushi" has controlled refrigerated temperature logistics, by sea and by air.

The product requires a logistics under temperature not exceeding 5°C for long term transports. It is stored in a cold room in France but can be shipped at room temperature to professionals if delivery times are less than 5 days. However, it is recommended to store it in the refrigerator.

The quantities are limited in the immediate future.



What are the possible culinary possibilities of skipjack tuna in block compared to the sliced one?

The uses are exactly the same, it will simply be necessary to acquire a grater to make the shavings (a professional quality grater is a long-lasting one).

It is important to respect the inclination of the "katsuobushi" block at 60 degrees to optimize the piece and especially not to grate by positioning the piece flat on the rasp.

"Katsuobushi" and health

"Katsuobushi" is very rich in nutritional values. 20% of the human body is composed of amino acids (proteins). Amino acids are essential for muscles, vital organs, bones, nerves, blood, skin... 9 of the 20 kinds of amino acids are not produced by the human body and must be provided by food. What is extraordinary is that "katsuobushi" contains, in a balanced way, all these 9 essential amino acids

Moreover, it is very rich in docosahexaenoic acid or DHA, necessary for development and brain memory, and in eicosapentaenoic acid or EPA recognized to prevent thrombosis (phlebitis, blood clots...).

Some information on skipjack tuna fishing, the raw material of "katsuobushi"

- Japan has only 32 vessels authorised to fish for skipjack tuna, a raw material necessary for the production of authentic "katsuobushi".
- Only 2 of these vessels have HACCP certification for the European Union.
- 6 additional vessels have just initiated a process to also obtain this HACCP certification for the European Union.
- Striped-bellied bonito fishing areas: western and central Pacific Ocean (80-90% around the Micronesia archipelago) and recently the Indian Ocean.
- A vessel requires 3 weeks to fish for skipjack tuna: 1 week to get to the fishing area, 1 week to fish, 1 week to return.
- The crew of a vessel consists of 13 Japanese and 20 to 23 foreigners from the fishing area (this is an agreement between Japan and the authorities of the countries that own the fishing areas).
- 1 vessel catches on average 500 tonnes of fish (60-70% skipjack tuna, the rest being mainly yellowfin tuna).
- 1 vessel fishes only 5 times a year during the legal fishing period.
- 1 vessel does not leave until 7 days after its return from fishing, the time to proceed with unloading, repair, maintenance, refuelling...
- The total annual fishing volume for skipjack bonito is 35,000 tonnes.
- 1/3 of this volume concerns the vessels of the port of Yaizu and the remaining two thirds are divided between Kagoshima, Kôchi, Wakayama, Nagasaki, Makurazaiki, Yamakawa...
- Vessels fish with seine nets and freeze on board at -40°C.
- Skipjack tuna in the middle of the seine net is generally not very damaged and will be mainly used for consumption as sashimi (slices of raw fish).
- The capture of skipjack is inexorably increasing with vessels from the American continent, China, Korea and India. The reason is simple: skipjack bonito meat is the main resource for making canned tuna.
- Japan has not increased its catches in the last 30 years.
- Of the 32 vessels registered in Japan dedicated to this fishery, two
 of them, recently bankrupt, have received support from the Nippon
 State in order to maintain their activity.
- The use of drifting fishing devices is prohibited from June to September (this law is valid worldwide).



The production process of the typical "katsuobushi"



The production process of "katsuobushi" is complex and time-consuming. It takes about a month to produce the "Arabushi" and two to six months to finish the "karebushi", fermented version. Although modern production equipment has been partially adopted, and productivity and hygiene have improved, the basic process has remained unchanged since ancient times.

"Katsuobushi" is prepared by skilled craftsmen who take great pride and confidence in their production of this traditional ingredient, which has played a key role in supporting Japanese culinary culture. Today most "katsuobushi" is produced in Makurazaki city and in the Yamagawa district of Ibusuki city (both in Kagoshima Prefecture on Kyushu Island in the south) and in Yaizu (in Shizuoka Prefecture, south of Tokyo).

A description of the typical stages of production of "katsuobushi"

- Step 1: Cut ("Namagiri")
 First cut off the heads and empty the skipjacks.
- Step 2: Cooking ("Shajuku")

 Boil the fillets for about one hour in water at 85-95°C. This process deactivates enzymes in the flesh, prevents decomposition, and coagulates proteins.
- Step 3: Cleaning ("Honenuki") Remove bones, fins and scales,
- Step 4: Smoking ("Baikan")

The next step is to repeat smoking of the boiled and cleaned skipjack tuna fillets over a wood fire until the moisture content drops to no less than 26%. The product obtained is "arabushi", a very aromatic smoky food.

When making "Karebushi", the surface of the "arabushi" is first shaved and the beneficial mould is cultivated twice or more ("Kabitsuke" process). The product obtained is called "Karebushi". As indicated by the production process above, "katsuobushi" is a 100% stripe-bellied bonito product and nothing else. Its difference with other smoked products is that there is no salt, condiment or preservative added for its production.

The advantages of the smoking process

The repeated smoking drying of the stripe-bellied bonito after cooking with simmering water gives the "katsuobushi" a very special aroma.

In addition, the phenolic substances contained in the smoke prevent fat oxidation. Fish fats oxidize particularly quickly and are susceptible to degradation. Unless dried by smoking, skipjack fillets would deteriorate quickly and would never take on the pleasant taste of "katsuobushi".

The essential role of mould (microscopic fungus)

The mould cultivation process plays a crucial role in determining the taste of "Karebushi". During this stage, a mould of Eurotium type, selected for its outstanding qualities, is grown, which serves to further reduce the moisture still contained in the "katsuobushi" after drying and smoking. In addition, the lipolytic enzymes contained in the mould break down the fat in the fillets, giving more transparency to the "dashi".

Etymology of the term "katsuobushi"

First, smoked dried fish is generally called "Fushi".

Secondly, the bonito or skipjack is called "Katsuo".

Perhaps you are beginning to understand since smoked and dried fish ("Fushi") is made with bonito / skipjack ("Katsuo"), hence the Japanese name "katsuobushi" (="Katsuo" + "Fushi"; the combination of the two words slightly changes the pronunciation).



How to use it?



"Katsuobushi" is used in many different forms in Japanese cuisine. In the past, in Japan, people bought "katsuobushi" in a store and grated it themselves at home before using it as an ingredient for "dashi" and ready meals. But times have changed. Today, "katsuobushi" can be found in various convenient forms. The first is in the form of shavings.

This version of "katsuobushi" in shavings packed in bags is sold in typical Japanese food stores under the name "Kezuribushi" (which means "katsuobushi" in shavings). Therefore, people no longer need to grate the "katsuobushi" to prepare the "katsuobushi dashi". "Kezuribushi" is available in a wide range of thicknesses, shapes, sizes, and quantities depending on the intended use; consumers can thus choose the variety adapted to their needs.

There are also other practical products for the preparation of "katsuobushi dashi". There is the powder, which is a powdered condiment, i.e. instant "katsuobushi dashi" prepared with sprayed "katsuobushi". There is also the liquid condiment prepared with "katsuobushi dashi" for noodle soup.

The use of these varieties of products makes "katsuobushi dashi" present in a large number of Japanese dishes. For example, it is used for Japanese noodle soup such as "Soba", "Udon", "Somen" and "Ramen"; and it serves as a base broth for soups such as "Miso" soup as well as for "Nimono" (simmered dishes) and "Nabe" (Japanese style stew); it is present as a key ingredient in "Tamagoyaki" (Japanese omelette), "Chawanmushi" (steamed custard), "Okonomiyaki" (salted Japanese crepe containing a variety of ingredients), and "Takoyaki" (octopus pellets).

Why "katsuobushi" is a judicious choice

The aroma of "katsuobushi" does not come from a single substance, but from a complex combination of many different substances. It is said that "katsuobushi" contains several hundred aromatic components, and that in this respect, there is no other comparable food. The aroma of "katsuobushi" is used to make the taste of food more appetizing, so a pinch of "Kezuribushi" sprinkled on "Tofu" or salad enhances the taste.

Nutritionally speaking, "katsuobushi" consists of more than 70% protein and only 3% fat.

Protein, one of the three main types of nutrients along with carbohydrates and fat, is essential to human life because it forms muscles, skin, hair, and nails. The proteins of "katsuobushi" all contain the nine essential amino acids in a balanced amount. In addition, we know that katsuobushi is extremely rich in nutrients such as niacin and B12 vitamin, which are essential to the human body.

Obesity is becoming a growing concern in many countries because it causes disease. One of the causes of obesity is thought to be the excessive consumption of high-fat, high-sweet meals.

Meals that contain large amounts of fat and sugars are appetizing and increase the pleasure of eating, but at the same time, they also increase obesity. If there was anything low in calories that made meals just as tasty, it would help prevent disease. In this respect, the effectiveness of "katsuobushi dashi" has been demonstrated by multiple experiments in university research institutes in Japan.

In addition, it has been shown that by making the most of the "Umami" of the "katsuobushi dashi" it is possible to reduce the salt often used excessively in cooking. Therefore, it may be argued that "katsuobushi" helps to keep people healthy by preventing hypertension caused by excessive sodium consumption.





How to prepare "katsuobushi dashi"?

The indications given below are for the preparation of "dashi" with "Kezuribushi" (= "katsuobushi" in fine shavings).

Make sure you have 30 grs of "Kezuribushi" and 11 of water.

- 1 Bring 11 of water to the boil in a saucepan.
- 2 Put 30 grs* of "Kezuribushi" in the saucepan. Turn off the flame immediately.
 - *The recommended ratio is 3-4 parts "Kezuribushi" per 100 parts water.
- The "Kezuribushi" will quickly fall to the bottom of the pan. When it is done, pass the liquid through a cloth or a strainer. You now have the delicious "dashi".



The use of "katsuobushi" as a garnish

Apart from the use of "katsuobushi dashi" in cooking, another common use of "katsuobushi" is to sprinkle "Kezuribushi" (= fine "katsuobushi" shavings) on food as a topping. Have you ever seen "Dancing katsuobushi" videos on Japanese ready-made foods such as "Takoyaki" (octopus balls) or "Okonomiyaki" (Japanese salted crepe containing a variety of ingredients)? The "Kezuribushi" (= thin shavings of "Katsuobusiri") expands and contracts under the influence of the hot steam of the food so that one has the impression that it dances, hence the name "Dancing katsuobushi". Needless to say, the use of "katsuobushi" as a garnish is not limited to "Takoyaki" and "Okonomiyaki". Some dishes are served with thin slices of "Arabushi" with a rich aroma or sprinkled with exquisitely sweet "Karebushi".

Today, the use of "katsuobushi" extends beyond Japanese cuisine. Japanese chefs take up the challenge of using "katsuobushi" for non-Japanese dishes, each one following his own inspiration. At the most basic level, given how it pleases the Japanese people's palate, "katsuobushi" is definitely an essential ingredient in their cupboard.

How to make the "awase dashi" with a mixture of "katsuobushi" and "kombu" (dried seaweed)

The indications given below are for the preparation of "awase dashi" (mixed dashi) with "katsuobushi" and "kombu" (dried seaweed). Make sure you have 30 grs of "Kezuribushi" (= fine shavings of katsuobushi"), 10 grs of "kombu" and 11 of water.

- Start by wiping any dirt on the surface of the "kombu" with a soft and clean cloth. Put the "kombu" in a saucepan and pour water over it.
- Set the pan on a low heat and heat the water and kombu gently. Just before the water starts to boil, remove the "kombu" from the pan
- 3 Then put the "Kezuribushi" (= fine "katsuobushi" shavings) in the

same pan. Turn off the fire and wait for the "Kezuribushi" to fall to the bottom. When it is done, pass (filter) the liquid through a cloth or a strainer. You now have the delicious "dashi".

The use of "Kezuribushi" (= fine shavings of "katsuobushi") allows you to quickly prepare the delicious "katsuobushi dashi" which is the basic broth used in Japanese cuisine as for "Nimono" (simmered vegetables) and "Nabe" (Japanese stew).

By adding "Shouyu" (soy sauce), "Mirin" (sweet sake seasoning) and sugar to "katsuobushi dashi" you will get a good soup for "Soba" noodles. In addition, you can enhance the flavours of "dashi" by mixing "katsuobushi dashi" with other "dashi" made from other smoked and dried fish such as "Saba" (mackerel) or "Soudagatsuo" (frigate tuna).



Chefs' testimonies ...



Chef Dominique CORBY

Maison de Minami restaurant

Former Chef of the Silver Tower in Tokyo, Master Chef of Le Cordon Bleu School Japan from October 2013 to March 2015.

Chef of the Maison Minami restaurant in Tokyo.

He is known for creating his dishes from regional and seasonal ingredients from all over Japan. His cuisine is a fusion of traditional French and Japanese cuisine.

"Katsuobushi gives a new dimension to flavours in cooking and remains essential for the production of dashi. Its ability to sublimate, enhance, and amplify flavours makes it a pillar of Japanese cuisine. It offers great possibilities, in French cuisine, for broths, garnishes...".



Chef TAKADA

La Cime restaurant

"La cime" is located in Osaka and was awarded its second Michelin star in 2016.

Chef Takada's extreme competence and sense of cooking serve to raise the notoriety of French cuisine in Japan.

Why is katsuobushi so important and necessary for the Japanese?

"I do not think that importance and necessity are the right terms: it is a question of community. Abroad, especially in Europe, people appreciate the smoky aromatic and gustatory notes. I think that this feeling offers a lot of possibilities and can be very creative. Inosinic acid and Umami are also very present in truffles and mushrooms. Depending on the cultural sensitivity of each individual, katsuobushi can offer the same potential and even represent an excellent alternative. I think katsuobushi is a "great" seasoning because it is more difficult to find what it doesn't match. The Japanese notion of compatibility is different from that of Westerners because the food culture is different.

Basic agreements can be easily found from seminars, the Internet and books. Everyone can appropriate their own creations or achievements after understanding the basics. For me, katsuobushi is similar to bacon. To begin to understand katsuobushi, I recommend having a little bit of it in your mouth all day long. The ideas for use will then come of their own accord."

What is the ideal combination with katsuobushi?

"Katsuobushi: smoky taste, Umami, acidity. I can't say what the ideal combination with katsuobushi is. However, it is complicated to combine it with extremely sweet foods and fruits, but it could offer excellent prospects by working on a good balance between the two."



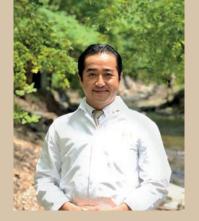
• Chef Masayasu YONEMURA

Yonemura restaurant

A restaurant not to be missed, awarded a Michelin star, located in the traditional district of Gion in Kyoto. His cuisine is a fusion of Japanese and French cuisine.

Why is katsuobushi so important and necessary for the Japanese?

"Katsuobushi has a delicate flavour and a powerful Umami. It also enhances the flavour of other foods. It has become an important, essential ingredient. The shaved katsuobushi can be used with other foods or to make a dashi broth in a short time. The manufacture of katsuobushi requires a lot of time, skills and knowledge. Its production is an art mastered by a limited number of craftsmen. But it is the mastery of these craftsmen that allows him to reveal high nutritional values and powerful Umamis. It will surely have an important role in this era when the world is more health conscious. It is undeniable that Umami related to katsuobushi will develop globally."



Chef Hisato
 NAKAHIGASHI
 Miyamaso inn

Miyamaso is a famous Japanese inn with a restaurant located in the mountains of Miyama, Kyoto Prefecture.

His restaurant has 2 Michelin stars. The cuisine created by the Akahigashi Chef is an ode to nature. Flowers, vegetables, wild plants and fish from the surrounding mountains, forests and rivers are omnipresent in his compositions.

Why is katsuobushi so important and necessary for the Japanese?

"For the Japanese, katsuobushi is an important source of nutrients and an irreplaceable ingredient containing a lot of Umami that satisfies the taste. Among katsuobushi, the one called Hon-karebushi is the easiest to use because it is rich in microorganisms and has a low residual moisture content. Microorganisms break down fats and oils from the flesh of skipjack bonito. Moreover, they increase the amount of amino acids and prevent oxidation. As a result, katsuobushi has a refreshing Umami taste. Associated with the Umami of vegetables, the taste of Umami is increased and multiplied. Many of the products I usually use are natural mountain ingredients; many of them have strong bitterness and unique flavours. Umami and the aroma of katsuobushi decrease and neutralize bitterness. The flavour of food is richer. Japanese dashi, such as katsuobushi dashi and kombudashi, change the original taste of the food and give it a more delicious flavour. In addition, Umami molecules are broken down and the absorption of amino acids (nutrients) in the body is better, making it a healthy food for the body."



• Chef NAKAMURA Nakamura restaurant

Nakamura restaurant is one of Kyoto's most prestigious restaurants, awarded three Michelin stars for six consecutive years.

This restaurant has been in existence for 200 years and Chef Nakamura represents the 6th generation.

Why is katsuobushi so important and necessary for the Japanese?

"Katsuobushi was developed from Japanese food culture and has become one of the emblematic ingredients of Japanese food. It takes up to 6 months to make it. It is placed on market shelves after being handled by several professionals, specialized craftsmen. It is not fragile and can be stored in the refrigerator. It is very easy to use to make a dashi. The dashi made with katsuobushi is very tasty and contains a lot of inosinic acid. Katsuobushi dashi is low-calorie and can be successfully used in health-oriented food culture. Japanese cuisine being recognized as a cultural heritage, I think it is possible to consider katsuobushi as a representative of Japanese cuisine, and then as a true cultural heritage."

What is the ideal combination with katsuobushi?

"One of the characteristics of katsuobushi is that it contains a lot of inosinic acid, one of the components of Umami. There is a synergistic effect combined with foods containing glutamic acid. During production, the katsuobushi are smoked. The smoking process, the reduced humidity level and its partial sterilization make it a special product. The finished katsuobushi has an elegant smoky perfume. When cooked with vegetables containing glutamic acid, Umami's taste develops with great depth. It is also a good match with sardines, herring, and fatty fish as well rich in inosinic acid."



Chef Yoshihiro TAKAHASHI

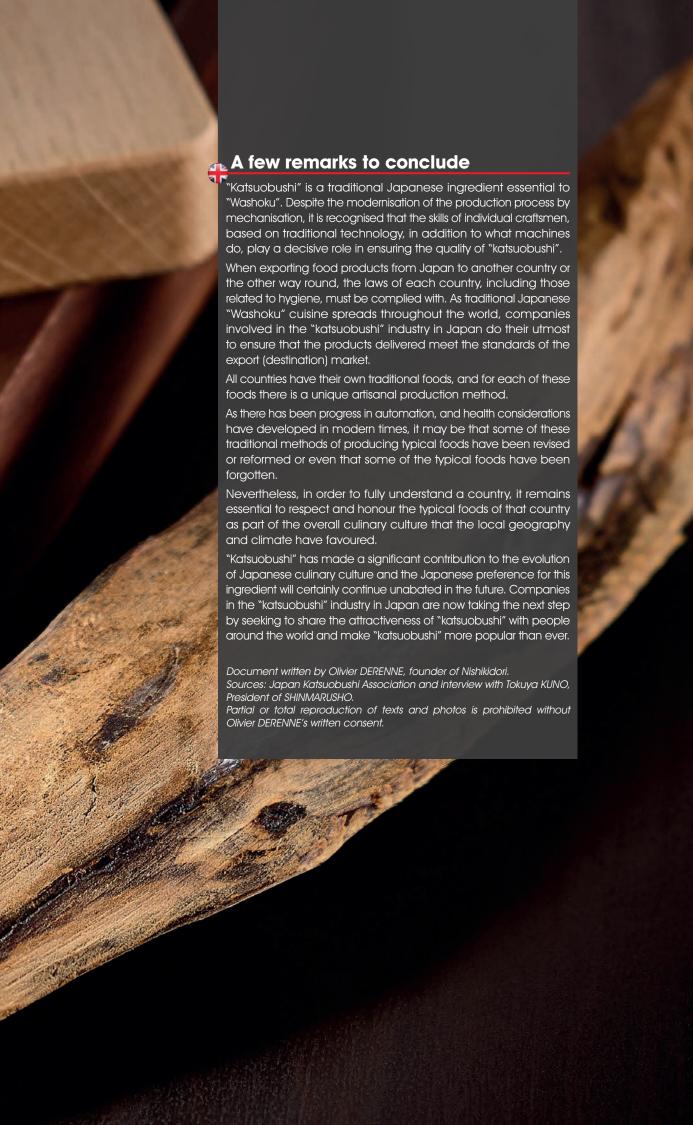
Hyotei restaurant

Hyotei restaurant is very famous in Kyoto. Created 450 years ago, it perpetuates the traditional cuisine of Kyoto. This Chef, representative of the 15th generation of the Takahashi family, has been awarded three stars by the Michelin Guide.

Why is katsuobushi so important and necessary for the Japanese? "Katsuobushi is a unique ingredient that is very rich in Umami and flavours. Its manufacturing process is very slow and meticulous, including smoking, drying, moulding, etc. The vast majority of the moisture contained in katsuobushi is extracted, making it a solid textured product. The older it is, the more the Umami increases. The synergistic effect of katsuobushi and Kombu creates a dashi with a lot of Umami flavour and a clear base or broth without any fat. The smoky flavour promotes appetite and enhances the flavours of other foods."

What is the ideal combination with katsuobushi?

"It marries particularly well with fish and also has excellent compatibility with meat and vegetables. For vegetables, some uses are exceptional, such as bamboo shoots, wild vegetables and root vegetables. The same applies to simmered dishes that are known to absorb all flavours. It improves the sometimes strong odours of seaweed and seafood prepared by steaming or decorating broths and foods. Katsuobushi is an essential ingredient when it comes to improving or enriching a dish."





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