

Sushi

Sushi (すし, 寿司, 鮓, pronounced [sɯɕiꜜꜜ] or [sɯꜜꜜꜜi]) is a Japanese dish of prepared vinegared rice (鮓飯 *sushi-meshi*), usually with some sugar and salt, accompanying a variety of ingredients (ネタ *neta*), such as seafood, vegetables, and occasionally tropical fruits. Styles of sushi and its presentation vary widely, but the one key ingredient is "sushi rice", also referred to as *shari* (しゃり), or *sumeshi* (酢飯).^[1]

Sushi is traditionally made with medium-grain white rice, though it can be prepared with brown rice or short-grain rice. It is very often prepared with seafood, such as squid, eel, yellowtail, salmon, tuna or imitation crab meat. Many types of sushi are vegetarian. It is often served with pickled ginger (*gari*), *wasabi*, and soy sauce. Daikon radish or pickled daikon (*takuan*) are popular garnishes for the dish.

Sushi is sometimes confused with *sashimi*, a related dish in Japanese cuisine that consists of thinly sliced raw fish, or occasionally meat, and an optional serving of rice.^[2]

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History

Sushi originates in a Southeast Asian dish, known as *narezushi* (馴れ寿司, 熟寿司 – "salted fish"), stored in fermented rice for possibly months at a time. The lacto-fermentation of the rice prevented the fish from spoiling;^[3] the rice would be discarded before consumption of the fish.^[4] This early type of sushi became an important source of protein for its Japanese consumers. The term *sushi* comes from an antiquated grammatical

<div></div> <div><i>Sushi</i></div>	
	
<i>Sushi platter</i>	
Alternative names	すし , 寿司 , 鮓
Course	appetizer, main dish
Place of origin	Japan
Associated national cuisine	Japanese cuisine
Main ingredients	vinegared rice
Ingredients generally used	seafood and vegetables
<div> <div></div> <div>Cookbook: <i>Sushi</i></div> </div> <div> <div></div> <div>Media: <i>Sushi</i></div> </div>	

Sushi	
寿司	
"Sushi" in <i>shinjītai</i> kanji	
Japanese name	
Kyūjitai	壽司
Shinjītai	寿司
Transcriptions	
Romanization	sushi

form no longer used in other contexts, and literally means "sour-tasting"; the overall dish has a sour and umami or savoury taste.^[5] Narezushi still exists as a regional specialty, notably as *funa-zushi* from Shiga Prefecture.^[6]

Vinegar began to be added to the preparation of narezushi in the Muromachi period (1336–1573) for the sake of enhancing both taste and preservation. In addition to increasing the sourness of the rice, the vinegar significantly increased the dish's longevity, causing the fermentation process to be shortened and eventually abandoned. The primitive sushi would be further developed in Osaka, where over several centuries it became *oshi-zushi* or "hako-zushi"; in this preparation, the seafood and rice were pressed into shape with wooden (typically bamboo) molds.

It was not until the Edo period (1603–1868) that fresh fish was served over vinegared rice and nori. The particular style of today's *nigirizushi* became popular in Edo (contemporary Tokyo) in the 1820s or 1830s. One common story of *nigirizushi*'s origins is of the chef Hanaya Yohei (1799–1858), who invented or perfected the technique in 1824 at his shop in Ryōgoku.^[6] The dish was originally termed *Edomae zushi* as it used freshly caught fish from the *Edo-mae* (Edo or Tokyo Bay); the term *Edomae nigirizushi* is still used today as a by-word for quality sushi, regardless of its ingredients' origins.^{[7][8]}

The earliest written mention of *sushi* in English described in the *Oxford English Dictionary* is in an 1893 book, *A Japanese Interior*, where it mentions sushi as "a roll of cold rice with fish, sea-weed, or some other flavoring".^{[9][10]} There is an earlier mention of sushi in James Hepburn's Japanese-English dictionary from 1873,^[11] and an 1879 article on Japanese cookery in the journal *Notes and Queries*.^[12]

Types

The common ingredient in all types of sushi is vinegared sushi rice. Fillings, toppings, condiments, and preparation vary widely.^[13]

Due to rendaku consonant mutation, *sushi* is spelled with *zu* instead of *su* when a prefix is attached, as in *nigirizushi*.

Chirashizushi

Chirashizushi (ちらし寿司, "scattered sushi", also referred to as *barazushi*) serves the rice in a bowl and tops it with a variety of raw fish and vegetable garnishes. It is commonly eaten because it is filling, fast and easy to make. It is eaten annually on Hinamatsuri in March.

- *Edomae chirashizushi* (Edo-style scattered *sushi*) is served with uncooked ingredients in an artful arrangement.
- *Gomokuzushi* (Kansai-style *sushi*) consists of cooked or uncooked ingredients mixed in the body of rice.
- *Sake-zushi* (Kyushu-style *sushi*) uses rice wine over vinegar in preparing the rice, and is topped with shrimp, sea bream, octopus, shiitake mushrooms, bamboo shoots and shredded omelette.



Sushi by Hiroshige in Edo period



Osaka-style sushi, also called "Oshi-zushi" or "hako-sushi"



Sushi platter in takeaway



Egg-wrapped sushi roll with soy sauce



Chirashizushi with raw ingredients

Inarizushi

Inarizushi (稲荷寿司) is a pouch of fried tofu typically filled with *sushi* rice alone.

Tales tell that *inarizushi* is named after the Shinto god *Inari*. Foxes, messengers of Inari, are believed to have a fondness for fried tofu, and an *Inari-zushi* roll has pointed corners that resemble fox ears.^[14]

Regional variations include pouches made of a thin omelette (帛紗寿司, *fukusa-zushi*, or 茶巾寿司, *chakin-zushi*) instead of tofu. It should not be confused with *inari* *maki*, which is a roll filled with flavored fried tofu. In Korean, *inarizushi* called *yubuchobap* ().

Cone sushi is a variant of *inarizushi* originating in Hawaii that may include green beans, carrots, or gobo along with rice, wrapped in a triangular *abura-age* piece. It is often sold in *okazu-ya* (Japanese delis) and as a component of bento boxes.^{[15][16][17][18]}



Three pieces of inarizushi

Makizushi

Makizushi (巻き寿司, "rolled sushi"), *norimaki* (海苔巻き, "Nori roll") or *makimono* (巻物, "variety of rolls") is a cylindrical piece, formed with the help of a bamboo mat known as a *makisu* (巻き簾). *Makizushi* is generally wrapped in nori (seaweed), but is occasionally wrapped in a thin omelette, soy paper, cucumber, or shiso (perilla) leaves. *Makizushi* is usually cut into six or eight pieces, which constitutes a single roll order. Below are some common types of *makizushi*, but many other kinds exist.

Futomaki (太巻, "thick, large or fat rolls") is a large cylindrical piece, usually with *nori* on the outside.^[19] A typical *futomaki* is five to six centimetres (2 to 2½ in) in diameter.^[20] They are often made with two, three, or more fillings that are chosen for their complementary tastes and colors. During the evening of the Setsubun festival, it is traditional in the Kansai region to eat uncut futomaki in its cylindrical form, where it is called *ehō-maki* (恵方巻, lit. happy direction rolls).^[21] By 2000 the custom had spread to all of Japan.^[22] Futomaki are often vegetarian, and may utilize strips of cucumber, *kampyō* gourd, *takenoko* bamboo shoots, or lotus root. Strips of *tamagoyaki* omelette, tiny fish roe, chopped tuna, and *oboro* (food) whitefish flakes are typical non-vegetarian fillings.^[19] Traditionally, the vinegared rice is lightly seasoned with salt and sugar. Popular protein ingredients are fish cakes, imitation crab meat, eggs, tunas, or shrimps. Vegetables usually include cucumbers, lettuces, and *takuan* (沢庵) (pickled radish). As a side note, the rice in Korean style Gimbap is none vinegar, and lightly seasoned with salt and sesame oil/perilla oil, and popular ingredients are carrots, spinaches, beef, kimchi, takuan.



Makizushi topped with tobiko



Makizushi in preparation

Short grain white rice is usually used, although short-grain brown rice, like olive oil on *nori*, is now becoming more widespread among the health-conscious. Rarely, sweet rice is mixed in *makizushi* rice. Nowadays, the rice in *makizushi* can be many kinds of black rice, boiled rice and cereals etc.Besides the common ingredients listed above, some varieties may include cheese, spicy cooked squid, *yakiniku*, *kamaboko*, lunch meat, sausage, bacon or spicy tuna. The *nori* may be brushed with sesame oil or sprinkled with sesame seeds. In a variation, sliced pieces of *makizushi* may be lightly fried with egg coating. *Tamago makizushi* (玉子巻き寿司) is *makizushi* is rolled out by a thin egg. *Tempura Makizushi* (天ぷら 巻き寿司) or *Agezushi* (揚げ寿司ロール) is a fried version of the dish.



Futomaki

Hosomaki (細巻, "thin rolls") is a small cylindrical piece, with *nori* on the outside. A typical *hosomaki* has a diameter of about 2.5 centimetres (1 in).^[20] They generally contain only one filling, often tuna, cucumber, *kanpyō*, nattō, umeboshi paste, squid with shiso(Japanese herb). *Kappamaki*, (河童巻) a kind of *Hosomaki* filled with cucumber, is named after the Japanese legendary water imp fond of cucumbers called the kappa. Traditionally, *kappamaki* is consumed to clear the palate between eating raw fish and other kinds of food, so that the flavors of the fish are distinct from the tastes of other foods.



Kappamaki

Tekkamaki (鉄火巻) is a kind of *hosomaki* filled with raw tuna. Although it is believed that the word *tekka*, meaning "red hot iron", alludes to the color of the tuna flesh or salmon flesh, it actually originated as a quick snack to eat in gambling dens called *tekkaba* (鉄火場), much like the sandwich.^{[23][24]} *Negitoromaki* (ねぎとろ巻) is a kind of *hosomaki* filled with scallion (*negi*) and chopped tuna (*toro*). Fatty tuna is often used in this style. *Tsunamayomaki* (ツナマヨ巻) is a kind of *hosomaki* filled with canned tuna tossed with mayonnaise.

Ehōmaki (恵方巻, "lucky direction roll") is a roll composed of seven ingredients considered to be lucky. Ehōmaki are often eaten on setsubun in Japan. The typical ingredients include *kanpyō*, egg, eel, and *shiitake* mushrooms. *Ehōmaki* often include other ingredients too. People usually eat the ehōmaki while facing the direction considered to be auspicious that year.^[25]

Temaki (手巻, "hand roll") is a large cone-shaped piece of *nori* on the outside and the ingredients spilling out the wide end. A typical *temaki* is about 10 centimetres (4 in) long, and is eaten with fingers because it is too awkward to pick it up with chopsticks. For optimal taste and texture, *temaki* must be eaten quickly after being made because the *nori* cone soon absorbs moisture from the filling and loses its crispness, making it somewhat difficult to bite through. For this reason, the *nori* in pre-made or take-out temaki is sealed in plastic film which is removed immediately before eating.^[26]

Modern Narezushi

Narezushi (熟れ寿司, "matured *sushi*") is a traditional form of fermented *sushi*. Skinned and gutted fish are stuffed with salt, placed in a wooden barrel, doused with salt again, then weighed down with a heavy *tsukemonoishi* (pickling stone). As days pass, water seeps out and is removed. After six months, this *sushi* can be eaten, remaining edible for another six months or more.^[27]

The most famous variety of *narezushi* are the ones offered as a specialty dish of Shiga Prefecture,^[28] particularly the *funa-zushi* made from fish of the crucian carp genus, the authentic version of which calls for the use *nigorobuna*, a particular locally differentiated variety of wild goldfish endemic to Lake Biwa.^[29]



Nattōmaki



Tekkamaki



Ehōmaki



funa-zushi (*narezushi* made from a crucian carp species)

Nigirizushi

Nigirizushi (握り寿司, "hand-pressed sushi") consists of an oblong mound of sushi rice that the chef presses between the palms of the hands to form an oval-shaped ball, and a topping (the *neta*) draped over the ball. It is usually served with a bit of *wasabi*; *neta* are typically fish such as salmon, tuna or other seafood. Certain toppings are typically bound to the rice with a thin strip of *nori*, most commonly octopus (*tako*), freshwater eel (*unagi*), sea eel (*anago*), squid (*ika*), and sweet egg (*tamago*). One order of a given type of fish typically results in two pieces, while a sushi set (sampler dish) may contain only one piece of each topping.

Gunkanmaki (軍艦巻, "warship roll") is a special type of *nigirizushi*: an oval, hand-formed clump of sushi rice that has a strip of *nori* wrapped around its perimeter to form a vessel that is filled with some soft, loose or fine-chopped ingredient that requires the confinement of *nori* such as roe, *nattō*, oysters, *uni* (sea urchin roe), corn with mayonnaise, scallops, and quail eggs. *Gunkan-maki* was invented at the Ginza Kyubey restaurant in 1941; its invention significantly expanded the repertoire of soft toppings used in sushi.^{[30][31]}

Temarizushi (手まり寿司, "ball sushi") is a sushi made by pressing rice and fish into a ball-shaped form by hand using a plastic wrap.



Nigirizushi



Several types of nigirizushi, rice hand-pressed with various seafood, including tuna, eel, and sea urchin roe *gunkanmaki*

Oshizushi

Oshizushi (押し寿司, "pressed sushi"), also known as *hako-zushi* (箱寿司, "box sushi"), is a pressed sushi from the Kansai region, a favorite and specialty of Osaka. A block-shaped piece is formed using a wooden mold, called an *oshibako*. The chef lines the bottom of the *oshibako* with the toppings, covers them with sushi rice, and then presses the lid of the mold down to create a compact, rectilinear block. The block is removed from the mold and then cut into bite-sized pieces. Particularly famous is *バツテラ* (*battera*, pressed mackerel sushi) or 鯖寿司 (*saba zushi*).^[32] In *oshizushi*, all the ingredients are either cooked or cured and raw fish is never used.^[33]



Japanese cutlassfish oshizushi at a restaurant in Minamata City, Kumamoto Prefecture

Western-style *sushi*

The increasing popularity of *sushi* around the world has resulted in variations typically found in the Western world, but rarely in Japan. A notable exception to this is the use of salmon, which was introduced by a Norwegian businessman tasked with helping the Norwegian salmon industry in the 1980s.^{[35][36][34]} Such creations to suit the Western palate were initially fueled by the invention of the *California roll* (a *norimaki* with crab (later, imitation crab), cucumber, and avocado). A wide variety of popular rolls (*norimaki* and *uramaki*) has evolved since. Norway roll is another variant of *uramakizushi* filled with *tamago* (omelette), imitation crab and cucumber, rolled with *shiso* leaf and *nori*, topped with slices of Norwegian salmon, garnished with lemon and mayonnaise.^[37]



Norway roll (ノルウェー巻き). A Norwegian businessman introduced the use of salmon as a sushi ingredient to Japan in the 1980s.^[34]

Uramaki

Uramaki (裏巻, "inside-out roll") is a medium-sized cylindrical piece with two or more fillings, and was developed as a result of the creation of the California roll, as a method originally meant to hide the *nori*. *Uramaki* differs from other *makimono* because the rice is on the outside and the *nori* inside. The filling is in the center surrounded by *nori*, then a layer of rice, and optionally an outer coating of some other ingredients such as roe or toasted sesame seeds. It can be made with different fillings, such as tuna, crab meat, avocado, mayonnaise, cucumber or carrots.

Examples of variations include the rainbow roll (an inside-out topped with thinly sliced *maguro*, *hamachi*, *ebi*, *sake* and avocado) and the caterpillar roll (an inside-out topped with thinly sliced avocado). Also commonly found is the "rock and roll" (an inside-out roll with barbecued freshwater eel and avocado with toasted sesame seeds on the outside).



Uramakizushi rolls

In Japan, *uramaki* is an uncommon type of *makimono*; because sushi is traditionally eaten by hand in Japan, the outer layer of rice can be quite difficult to handle with fingers.^[38]

American-style *makizushi*

Futomaki is a more popular variation of sushi within the United States, and comes in variations that take their names from their places of origin. Other rolls may include a variety of ingredients, including chopped scallops, spicy tuna, beef or chicken *teriyaki* roll, *okra*, and assorted vegetables such as cucumber and avocado, and the tempura roll, where shrimp tempura is inside the roll or the entire roll is battered and fried

tempura-style. In the Southern United States, many sushi restaurants prepare rolls using crawfish. Sometimes, rolls are made with brown rice or black rice, which appear in Japanese cuisine as well.

Per Food and Drug Administration regulations, raw fish served in the United States must be frozen prior to serving in order to kill parasites.^[39] Because of this and the relative difficulty of acquiring fresh seafood compared to Japan, raw seafood (e.g., sashimi) is not as prevalent a component in American-style sushi.

Since rolls are often made to-order it is not unusual for the customer to specify the exact ingredients desired (e.g. salmon roll, cucumber roll, avocado roll, tuna roll, shrimp or tuna tempura roll, etc.). Though the menu names of dishes often vary by restaurant, some examples include:



Rainbow roll, *uramaki* with multiple fillings including shrimp tempura, salmon, avocado, mango, with rice mixed with *tobiko*

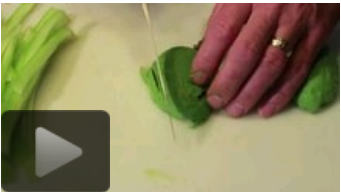
Sushi roll name	Definition
Alaskan roll	a variant of the <u>California roll</u> with raw salmon on the inside, or layered on the outside. ^[40]
Boston roll	An <i>uramaki</i> <u>California roll</u> with <u>poached shrimp</u> instead of <u>imitation crab</u> . ^[41]
<u>British Columbia roll</u>	contains grilled or barbecued salmon skin, cucumber, sweet sauce, sometimes with <u>roe</u> . Also sometimes referred to as salmon skin rolls outside of British Columbia, Canada. ^[42]
<u>California roll</u>	consists of <u>avocado</u> , <i>kani kama</i> (imitation crab/ <u>crab stick</u>) (also can contain real crab in "premium" varieties), <u>cucumber</u> , and <u>tobiko</u> , often made as <i>uramaki</i> (with rice on the outside, <i>nori</i> on the inside) ^[43]
Dynamite roll	includes <u>yellowtail</u> (<i>hamachi</i>) or prawn <u>tempura</u> , and fillings such as bean sprouts, carrots, avocado, cucumber, chili, spicy mayonnaise, and roe. ^[44]
Hawaiian roll	contains <u>shoyu</u> tuna (canned), <u>tamago</u> , <u>kanpyō</u> , <u>kamaboko</u> , and the distinctive red and green <i>hana ebi</i> (shrimp powder). ^[45]
Mango roll	includes fillings such as avocado, crab meat, tempura shrimp, mango slices, and topped off with a creamy mango paste. ^[46]
Michigan roll	includes fillings such as spicy tuna, smelt roe, spicy sauce, avocado, and sushi rice. Is a variation on spicy tuna roll. ^[47]
New Mexico roll	originating in <u>New Mexico</u> ; includes <u>New Mexico green chile</u> (sometimes tempura fried), teriyaki sauce, and rice. ^{[48][49]} Sometimes simply referred to as a "green chile (tempura) roll" within the state. ^{[50][51]}
<u>Philadelphia roll</u>	consists of raw or smoked salmon, <u>cream cheese</u> (the name refers to <u>Philadelphia cream cheese</u>), cucumber or avocado, or onion. ^[52]
<u>Rainbow roll</u>	is a California roll <i>uramaki</i> with multiple types of fish (commonly yellowtail, tuna, salmon, snapper, white fish, eel, etc.) and avocado wrapped around it. ^[53]
<u>Seattle roll</u>	consists of cucumber, avocado, cream cheese and raw or <u>smoked salmon</u> . ^[54]
Spicy tuna roll	includes raw tuna mixed with hot sauce infused mayonnaise.
<u>Spider roll</u>	includes fried <u>soft-shell crab</u> and other fillings such as cucumber, avocado, daikon sprouts or lettuce, roe, and sometimes spicy mayonnaise. ^[55]
<u>Sushi burrito</u>	a large, customizable roll offered in a number of "sushi burrito" restaurants in the United States. ^[56]

Ingredients

All *sushi* has a base of specially prepared rice, complemented with other ingredients.

Sushi-meshi

Sushi-meshi 鮓飯 (also known as *Su-meshi* 酢飯, *shari* 舍利, or *gohan* ご飯) is a preparation of white, short-grained, Japanese rice mixed with a dressing consisting of rice vinegar, sugar, salt, and occasionally kombu and *sake*. It has to be cooled to room temperature before being used for a filling in a *sushi* or else it will get too sticky while being seasoned. Traditionally, the mixing is done with a hangiri, which is a round, flat-bottom wooden tub or barrel, and a wooden paddle (shamoji).



Video of making *sushi* without fish

Sushi rice is prepared with short-grain Japanese rice, which has a consistency that differs from long-grain strains such as those from India, Sri Lanka, Bangladesh, Thailand, and Vietnam. The essential quality is its stickiness or glutinousness, although the type of rice used for sushi is different from glutinous rice. Freshly harvested rice (*shinmai*) typically contains too much water, and requires extra time to drain the rice cooker after washing. In some fusion cuisine restaurants, short-grain brown rice and wild rice are also used.

There are regional variations in sushi rice and individual chefs have their individual methods. Most of the variations are in the rice vinegar dressing: the Kantō region (or East Japan) version of the dressing commonly uses more salt; in Kansai region (or West Japan), the dressing has more sugar.

Nori

The black seaweed wrappers used in *makimono* are called *nori* (海苔). *Nori* is a type of algae, traditionally cultivated in the harbors of Japan. Originally, algae was scraped from dock pilings, rolled out into thin, edible sheets, and dried in the sun, in a process similar to making rice paper.^[57] Today, the commercial product is farmed, processed, toasted, packaged, and sold in sheets.

The size of a *nori* sheet influences the size of *makimono*. A full-size sheet produces *futomaki*, and a half produces *hosomaki* and *temaki*. To produce *gunkan* and some other *makimono*, an appropriately-sized piece of *nori* is cut from a whole sheet.

Nori by itself is an edible snack and is available with salt or flavored with teriyaki sauce. The flavored variety, however, tends to be of lesser quality and is not suitable for sushi.

When making *fukusazushi*, a paper-thin omelette may replace a sheet of *nori* as the wrapping. The omelette is traditionally made on a rectangular omelette pan, known as a makiyakinabe, and used to form the pouch for the rice and fillings.^[58]

Gu

The ingredients used inside sushi are called *gu*, and are, typically, varieties of fish.^[59] For culinary, sanitary, and aesthetic reasons, the minimum quality and freshness of fish to be eaten raw must be superior to that of fish which is to be cooked. Sushi chefs are trained to recognize important attributes, including smell, color, firmness, and freedom from parasites that may go undetected in commercial inspection. Commonly used fish are tuna (*maguro*, *shiro-maguro*), Japanese amberjack, yellowtail (*hamachi*), snapper (*kurodai*), mackerel (*saba*), and salmon (*sake*). The most valued sushi ingredient is *toro*, the fatty cut of the fish.^[60] This comes in a variety of *ōtoro* (often from the bluefin species of tuna) and *chūtoro*, meaning "middle toro", implying that it is halfway into the fattiness between *toro* and the regular cut. *Aburi* style refers to *nigiri* sushi where the fish is partially grilled (topside) and partially raw. Most nigiri sushi will have completely raw toppings, called *neta*.^[59]

Other seafoods such as squid (*ika*), eel (*anago* and *unagi*), pike conger (*hamo*), octopus (*tako*), shrimp (*ebi* and *amaebi*), clam (*mirugai*, *aoyagi* and *akagai*), fish roe (*ikura*, *masago*, *kazunoko* and *tobiko*), sea urchin (*uni*), crab (*kani*), and various kinds of shellfish (abalone, prawn, scallop) are the most popular seafoods in sushi. Oysters, however, are less common, as the taste is not thought to go well with the rice. *Kani kama*, or imitation crab stick, is commonly substituted for real crab, most notably in California rolls.^[61]

Pickled daikon radish (*takuan*) in *shinko maki*, pickled vegetables (*tsukemono*), fermented soybeans (*nattō*) in *nattō maki*, avocado, cucumber in *kappa maki*, asparagus,^[62] yam, pickled ume (*umeboshi*), gourd (*kampyō*), burdock (*gobo*), and sweet corn (possibly mixed with mayonnaise) are also used in sushi.

Tofu and eggs (in the form of slightly sweet, layered omelette called tamagoyaki and raw quail eggs ride as a *gunkan-maki* topping) are common.

Condiments

Sushi is commonly eaten with condiments. Sushi may be dipped in *shōyu* (soy sauce), and is usually flavored with *wasabi*, a piquant paste made from the grated stem of the Wasabia japonica plant. Japanese-style mayonnaise is a common condiment in Japan on salmon, pork and other sushi cuts.

True *wasabi* has anti-microbial properties and may reduce the risk of food poisoning.^[63] The traditional grating tool for *wasabi* is a sharkskin grater or *samegawa oroshi*. An imitation *wasabi* (*seiyo-wasabi*), made from horseradish, mustard powder and green dye is common. It is found at lower-end *kaiten-zushi* restaurants, in bento box sushi and at most restaurants outside Japan. If manufactured in Japan, it may be labelled "Japanese Horseradish".^[64]

Gari (sweet, pickled ginger) is eaten in between sushi courses to both cleanse the palate and aid in digestion. In Japan, green tea (*ocha*) is invariably served together with sushi. Better sushi restaurants often use a distinctive premium tea known as mecha. In sushi vocabulary, green tea is known as *agari*.

Sushi may be garnished with gobo, grated daikon, thinly sliced vegetables, carrots/radishes/cucumbers that have been shaped to look like flowers, real flowers, or seaweed salad.

When closely arranged on a tray, different pieces are often separated by green strips called *baran* or *kiri-zasa* (切り笹). These dividers prevent the flavors of neighboring pieces of sushi from mixing and help to achieve an attractive presentation. Originally, these were cut leaves from the Aspidistra elatior (葉蘭 *haran*) and *Sasa veitchii* (熊笹 *kuma-zasa*)



Sushi chef preparing nigirizushi, Kyoto, Japan



Sheets of nori.



Sushi made of meats other than fish (whether raw or cooked) is a variation often seen in Japan.



Yaki anago-ippon-nigiri (焼きアナゴ一本握り) – a roasted and sweet-sauced whole conger



Ebifurai-maki (エビフライ巻き) – fried-shrimp roll

plants, respectively. Using actual leaves had the added benefit of releasing antimicrobial phytoncides when cut thereby extending the limited shelf life of the sushi.^[65] Sushi bento boxes are a staple of Japanese supermarkets and convenience stores. As these stores began rising in prominence in the 1960s, the labor-intensive cut leaves were increasingly replaced with green plastic in order to lower costs. This coincided with the increased prevalence of refrigeration which acted to extend the shelf life of sushi without the need for the cut leaves. Today the plastic strips are commonly used in sushi bento boxes and to a lesser degree in sushi presentations found in sushi bars and restaurants. In store-sold or to-go packages of sushi, the plastic leaf strips are often used to prevent the rolls from coming into early or unwanted contact with the ginger and *wasabi* included with the dish.^[66]

Nutrition

The main ingredients of traditional Japanese sushi, raw fish and rice, are naturally low in fat, high in protein, carbohydrates (the rice only), vitamins, and minerals, as are *gari* and *nori*. Other vegetables wrapped within the sushi also offer various vitamins and minerals. Many of the seafood ingredients also contain omega-3 fatty acids, which have a variety of health benefits.^[67] The omega-3 fatty acids found in fish has certain beneficial properties, especially on cardiovascular health, natural anti-inflammatory compounds, and play a role in brain function.^[68]

Generally sushi is not a particularly fattening food. However, rice in sushi contains a fair amount of carbohydrates, plus the addition of other ingredients such as mayonnaise added into sushi rolls might increase the caloric content.^[69] Sushi also has a relatively high sodium content, especially contributed from *shoyu* soy sauce seasoning.^[68]

Health risks

Some of the ingredients in sushi can present health risks. Large marine apex predators such as tuna (especially bluefin) can harbor high levels of methylmercury, which can lead to mercury poisoning when consumed in large quantity^[70] or when consumed by certain higher-risk groups, including women who are pregnant or may become pregnant, nursing mothers and young children.^[71]

According to recent studies, there have been about 18 million infections worldwide from eating raw fish.^[72] This serves as a great risk to expecting mothers due to the health risks that medical interventions or treatment measures may pose on the developing fetus.^[72] Parasitic infections can have a wide range of health impacts, including bowel obstruction, anemia, liver disease, and more.^[72] The impact of these illnesses alone can pose some health concerns on the expecting mother and baby, but the curative measures that may need to take place to recover, are also a concern as well.^[72]

Sashimi or other types of sushi containing raw fish present a risk of infection by three main types of parasites:

- *Clonorchis sinensis*, a flake which can cause clonorchiasis^[73]
- *Anisakis*, a roundworm which can cause anisakiasis^[74]
- *Diphyllobothrium*, a tapeworm which can cause diphyllobothriasis^[75]

For the above reasons, EU regulations forbid the use of fresh raw fish. It must be frozen at temperatures below −20 °C (−4 °F) in all parts of the product for no less than 24 hours.^[76] As such, a number of fishing boats, suppliers and end users "super-freeze" fish for sushi to temperatures as low as −60 °C.^[77] As well as parasite destruction, super-freezing also prevents oxidation of the blood in tuna flesh, thus preventing the discoloration that happens at temperatures above −20 °C.^[78]

Some forms of sushi, notably those containing pufferfish fugu and some kinds of shellfish, can cause severe poisoning if not prepared properly. Particularly, fugu consumption can be fatal. Fugu fish has a lethal dose of tetrodotoxin in its internal organs and, by law in many countries, must be prepared by a licensed fugu chef who has passed the prefectural examination in Japan.^[79] The licensing examination process consists of a written test, a fish-identification test, and a practical test that involves preparing the fugu and separating out the poisonous organs. Only about 35 percent of the applicants pass.^[80]

Sustainable sushi

Sustainable sushi is sushi made from fished or farmed sources that can be maintained or whose future production does not significantly jeopardize the ecosystems from which it is acquired. Concerns over the sustainability of sushi ingredients arise from greater concerns over environmental, economic and social stability and human health.

Presentation

Traditionally, sushi is served on minimalist Japanese-style, geometric, mono- or duo-tone wood or lacquer plates, in keeping with the aesthetic qualities of this cuisine.

Many sushi restaurants offer fixed-price sets, selected by the chef from the catch of the day. These are often graded as *shō-chiku-bai* (松竹梅), *shō-matsu* (松, pine), *chiku/take* (竹, bamboo) and *bai/ume* (梅, plum), with *matsu* the most expensive and *ume* the cheapest. Sushi restaurants will often have private booth dining, where guests are asked to remove their shoes, leaving them outside the room; However, most sushi bars offer diners a casual experience with an open dining room concept.



Date-Maki (伊達巻) – *futomaki*
wrapped with sweet tamagoyaki



Sushi in shops are usually sold in plastic trays.

Sushi may be served *kaiten zushi* (sushi train) style. Color-coded plates of sushi are placed on a conveyor belt; as the belt passes, customers choose as they please. After finishing, the bill is tallied by counting how many plates of each color have been taken. Newer *kaiten zushi* restaurants use barcodes or RFID tags embedded in the dishes to manage elapsed time after the item was prepared.^[81]

Glossary

Some specialized or slang terms are used in the sushi culture. Most of these terms are used only in sushi bars.

- *Agari*: "Rise up" Green tea. *Ocha* (お茶) in usual Japanese.
- *Gari*: Sweet, pickled and sliced ginger, or sushi ginger. *Shōga* (生姜) in standard Japanese.
- *Gyoku*: "Jewel". Sweet and cubic-shaped omelette. *Tamagoyaki* (卵焼, 玉子焼) in standard Japanese.
- *Murasaki*: "Violet" or "purple" (color). Soy sauce. *Shōyu* (醤油) in standard Japanese.
- *Neta*: Toppings on *nigiri* or fillings in *makimono*. Ne-ta is from reversal of ta-ne. *Tane* (種) in standard Japanese.
- *Oaiso*: "Compliment". Bill or check. *Oaiso* may be used in not only sushi bars but also izakaya.^{[82][83]} Okanjō or chekku (お勘定 or チェック) in standard Japanese.
- *Otemoto*: Chopsticks. *Otemoto* means the nearest thing from the customer seated. *Hashi* (箸) or ohashi in standard Japanese.
- *Sabi*: Japanese horseradish. Contracted form of *wasabi* (山葵).
- *Shari*: Vinegar rice or rice. It may originally be from Sanskrit (*zaali* □□□□) meaning rice or *Śarīra*. *Gohan* (ご飯) or *meshi* (飯) in standard Japanese.
- *Tsume*: Sweet thick sauce mainly made of soy sauce. *Nitsume* (煮詰め) in standard Japanese.



Sushi served on a wooden platter at a sushi restaurant in Kanagawa Prefecture, Japan.



Meat sushi

Etiquette

Unlike sashimi, which is almost always eaten with chopsticks, *nigirizushi* is traditionally eaten with the fingers, even in formal settings.^[84] Although it is commonly served on a small platter with a side dish for dipping, sushi can also be served in a bento, a box with small compartments that hold the various dishes of the meal.

Soy sauce is the usual condiment, and sushi is normally served with a small sauce dish, or a compartment in the bento. Traditional etiquette suggests that the sushi is turned over so that only the topping is dipped; this is because the soy sauce is for flavoring the topping, not the rice, and because the rice would absorb too much soy sauce and would fall apart.^[85] If it is difficult to turn the sushi upside-down, one can baste the sushi in soy sauce using *gari* (sliced ginger) as a brush. Toppings that have their own sauce (such as eel) should not be eaten with soy sauce.

Traditionally, the sushi chef will add an appropriate amount of *wasabi* to the *sushi* while preparing it, and etiquette suggests eating the sushi as is, since the chef is supposed to know the proper amount of *wasabi* to use. However, today *wasabi* is more a matter of personal taste, and even restaurants in Japan may serve *wasabi* on the side for customers to use at their discretion, even when there is *wasabi* already in the dish.^[86]

Preparation utensils	
Utensil	Definition
<i>Fukin</i>	Kitchen cloth
<i>Hangiri</i>	Rice barrel
<i>Hocho</i>	Kitchen knives
<i>Makisu</i>	Bamboo rolling mat
<i>Ryoribashi</i> or <i>Saibashi</i>	Cooking chopsticks
<i>Shamoji</i>	Wooden rice paddle
<i>Makiyakinabe</i>	Rectangular omelette pan
<i>Oshizushihako</i>	a mold used to make <i>oshizushi</i>

Gallery



Toro nigiri (fatty tuna belly) (鮪とろ握り)



Salmon roll (巻き鮭)



Kakinoha (persimmon leaf) sushi (柿の葉寿司)



Chakin-sushi, wrapped in thin omelette. (茶巾寿司)



Sushi plate (盛り合わせ)



Ikura gunkan-maki (イクラ軍艦巻き)



Sasa (bamboo leaf) sushi (笹寿司)



Unagi (teriyaki-roasted freshwater eel) sushi (鰻寿司)



Nigirizushi for sale at a supermarket in Tokyo



Assorted sushi (盛り合わせ)



Assorted Western sushi (盛り合わせ)



Western California roll and tuna roll *uramaki* (カリフォルニア巻き)



Western spicy tuna hand roll (スパイシーツナロール)



Western spicy shrimp roll (スパイシー海老ロール)

See also

- Burong isda*, Filipino fermented fish and rice similar to narezushi
- Gimbap*, Korean variant of makizushi
- Mett*, similar German dish, but using pork or beef instead of fish
- Itadakimasu*, Japanese dining etiquette
- List of sushi and sashimi ingredients
- List of sushi restaurants
- Pla ra*, Thai fermented fish and rice similar to narezushi
- Nyotaimori*, sushi presented on nude female body
- Sashimi bōchō*, Japanese knife to slice raw fish and seafood
- Spam musubi, Hawaiian variant of *nigirizushi*
- Sushi machine
- Sushi burrito

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p. 181: "While we were waiting for my lord and my lady to appear, domestics served us with tea and sushi or rice sandwiches, and the year-old baby was brought in and exhibited."
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