

Sake: Its Characteristics & Charm

By Ishikawa Takeaki

Sake, brewed from rice and rice-*koji* (a culture of *Aspergillus oryzae* – a kind of mold – grown on and within steamed rice grains) has long been familiar to Japanese as the country's traditional alcoholic drink. *Sake* is usually drunk together with dishes, but *sake* with a fragrant savor and sweet *sake* are preferred as an aperitif.

Sake is not only a mere alcoholic drink for the Japanese but also a holy drink. In particular, marriage is a ceremony to exchange an oath of eternal love to continue as a couple in front of God, where a bride and a bridegroom share a cup with each other and drink *sake* as shown in the photo below. It means a contract between God and a couple; in other words, drinking *sake* is considered to be a tool of a contract with God. Such manners and customs are left in a Japanese way of thinking.

History of Ties between Sake & Japanese

The technique of brewing *sake* from rice is said to have come from China together with rice cultivation more than 2,000 years ago, toward the end of the *Jomon* period.

Sake charmed people at that time and, according to a Japan-related portion of the ancient Chinese chronicle "*Wei zhi*" (Record of Wei) written in the 3rd century, Japanese favored *sake* and drank it while singing and dancing, even when they were sad at funeral rites.

"*Kojiki*" (A Record of Ancient Matters) compiled in Japan in the early 8th century carries a myth about *sake*. It is about a hero who fought off an eight-headed monster serpent (*Yamata-no-orochi*) by making it drink "*yashiori no sake*" (high-proof *sake* brewed eight times from *sake*, instead of water).

The reason Japanese have favored *sake* brewed from rice since ancient times appears to lie in its comfortable intoxication.

Unless guzzling or drinking quickly, a mellow, cheerful mood continues. As this

alluring feeling had something in common to a "sense of oneness with God" in the ancient times, *sake* was often considered a medium linking God and people.

As mentioned before, *sake* is a drink shared with God as proof of a contract with God, and *sake* is a must in *Shinto* rites.

The splitting open of the lid of a barrel containing *sake* dedicated to God is called "*kagami-biraki*" (mirror opening) as the round, flat barrelhead is called *kagami* (mirror). The practice is meant as an offering of sacred *sake* (*omiki*) to be savored together with God and is still held on festive occasions even today (photo above). *Sake* contained in a Japanese cedar barrel has a refreshing hint of cedar fragrance and flavor.

In modern society, *sake* is an effective communication tool, but in the ancient times, it was effective as a tool to heighten social solidarity in a community, and for rulers at that time, it was a precious tool to win the hearts of people. At the end of the 7th century, the Imperial Court set up a *sake* brewery department to manage brewing of the drink.

Sake brewing was then moved to Buddhist priests' residential quarters because most advanced techniques at that time were accumulated there. The "*Tamon'in Nikki*" (Tamon'in Diary), written at priests' residential quarters between 1478 and 1618, describes *sake* brewing at the time in detail. In that period, basic techniques for *sake* brewing still adopted nowadays were completed – the use of polished rice alone as

material rice, stepwise mashing, a filtering method using *sake* bags, and a pasteurization technique (low-temperature disinfection).

In the 14th century, those in power, who noticed economic effects of *sake*, began to impose taxes on it. With the development of a method to produce 1.8-kiloliter wooden tubs in the 16th century, mass brewing of *sake* became possible on an industrial scale, and the brewing was left to the hands of merchants. The emergence of Edo (today's Tokyo) as a large consumption city in the 17th century and thereafter brought prosperity to the *sake* brewing industry in the Itami and Nada regions in western Japan, supported by the development of the shipping industry.

Method of Sake Brewing

Sake has elegant sweetness accompanied by fruity and tasty flavors, and moderate acid savor harmonized with such tastes. Why is this when *sake* is brewed from rice and rice-*koji*? In addition, the proof of *sake* is considerably higher than that of wine at 15-16%.

That secret is in a unique brewing method. It is characterized by:

- (1) the use of highly polished rice;
- (2) the peculiar fragrance and good taste brought from rice-*koji*;
- (3) a *sake* yeast-fermenting method of permitting it to gradually adapt itself to the mash environment under a three-step mashing formula in which the material is mashed in three batches over four days;
- (4) parallel fermentation, which combines alcoholic fermentation by *sake* yeast with saccharification of rice grain starch by *koji* enzymes;
- (5) long fermentation (20-30 days) at low temperatures (10-17 C), far lower than the suitable temperature of 30 C for yeast to grow; and
- (6) mash filtration starting with natural filtration and then squeezing it by gradually applying pressure.



Photos: Gekkeikan Sake Co. (left/right), Meguro Gajoen (middle)

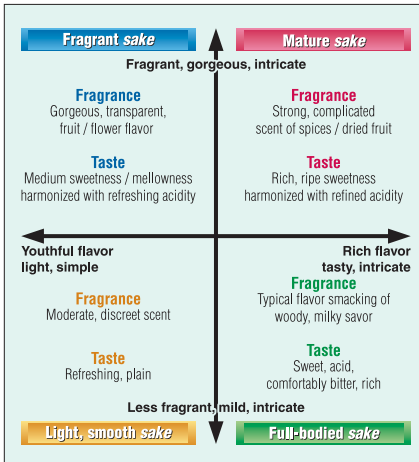
(middle) *Kagami-biraki* at marriage party
(right) *Sakabayashi*: the symbol of a sake brewery

Photo: Watabe Wedding Co.



The bride and the bridegroom sip sake from a shared cup in a *Shinto*-style marriage rite.

Sake classified into 4 groups depending on fragrance & taste



In sake brewing, mashing is possible all year round, of course, but the cold season is best suited. Sake brewed during the cold season is called *kanzukuri* (made in winter) and is said to be of good quality. New sake just filtered out is known as *funakuchi-shu* (sake just out of the barrel tap), and it features fresh fragrance and brash, raw flavor. Usually, new sake is stored and allowed to mature for about six months after pasteurization. During this period, sake's fragrance is mellowed, and its taste becomes smooth. In autumn, sake is shipped as a finished product.

There is also freshly fragrant "nama-shu" (or *nama-zake*: live sake), a product stored without pasteurization under careful, clean conditions. And sake stored and matured for more than three years has unique ripe fragrance, and rich and mellow taste. It is marketed as long-matured sake.

The symbol of a sake brewery is *sakabayashi*, Japanese cedar leaves bundled in a large ball shape as shown in the photo upper right. A freshly green *sakabayashi* is hung out under the eaves to inform people that new sake has been brewed. The *sakabayashi* gradually withers and turns brown in autumn to tell drinkers that sake has matured, with its taste turning mellow, and ready for savoring.

Labeling & Classification of Sake

There are three major "specially named" types of sake – *ginjo-shu*, *junmai-shu* and *honjozo-shu* – which are further grouped into eight categories depending on raw materials used such as distilled alcohol, and

Table 1 Labeling standards of sake brewing method & quality

Special names	Materials used	Rice polishing rate*	Requirements
<i>Ginjo-shu</i>	Rice, rice- <i>koji</i> , distilled alcohol	60% or less	Brewed from polished rice, inherent fragrance, good color & gloss
<i>Daiginjo-shu</i>	Rice, rice- <i>koji</i> , distilled alcohol	50% or less	Brewed from polished rice, inherent fragrance, esp. good color & gloss
<i>Junmai-shu</i>	Rice, rice- <i>koji</i>	—	Good color & gloss
<i>Junmai-ginjo-shu</i>	Rice, rice- <i>koji</i>	60% or less	Brewed from polished rice, inherent fragrance, good color & gloss
<i>Junmai-daiginjoshu</i>	Rice, rice- <i>koji</i>	50% or less	Brewed from polished rice, inherent fragrance, esp. good color & gloss
<i>Tokubetsu-junmai-shu</i>	Rice, rice- <i>koji</i>	60% or less, or based on special brewing method (explanation on label needed)	Brewed from polished rice, inherent fragrance, esp. good color & gloss
<i>Honjozo-shu</i>	Rice, rice- <i>koji</i> , distilled alcohol	70% or less	Fragrance, good color & gloss
<i>Tokubetsu-honjozo-shu</i>	Rice, rice- <i>koji</i> , distilled alcohol	60% or less, or based on special brewing method (explanation on label needed)	Brewed from polished rice, inherent fragrance, esp. good color & gloss

In addition to the above requirements, it is stipulated that "the ratio of rice-*koji* used must be 15% or more" as a common standard of each specially named sake brand.

methods of brewing employed such as the quality of polished rice or use of other special methods. Sake brands satisfying the requirements shown in Table 1 can show pertinent special names on their labels.

Sake is divided into four types depending on its fragrance and taste as shown in the chart above – sake with fragrance and a plain, subtle taste; with a bit of scent and light, smooth taste; with a mellow fragrance and full-bodied taste; and with a rich, mature fragrance and smooth taste. Sake's sweetness/dryness and richness are quantified by the contents of sugar (glucose) and organic acid in sake, becoming indicators of the varying degrees of flavor.*

There are dishes suited to each type of sake. The first and second types of sake better suit dishes with less scent and light flavor, and the other types better suit cuisine with fragrant, fatty and rich-flavored characteristics.

How to Enjoy Sake

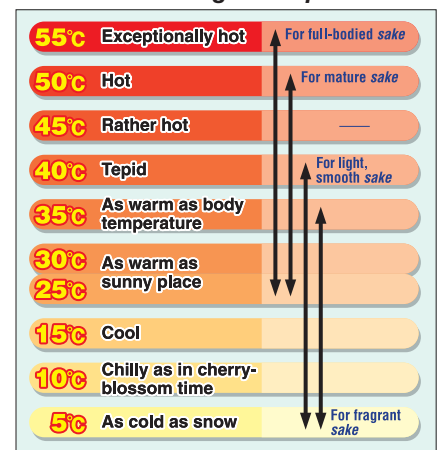
Our country has four distinct seasons, and Japanese who have the strong tradition of admiring nature love to enjoy sake by attaching seasonal names to it. In spring, for example, it is *hanami-zake* (sake drunk while viewing cherry blossoms). In summer, it is *natsugoshi-no-sake* (sake for going across summer) or *shokibarai-no-sake* (beating the summer heat). It is moon-viewing *tsukimi-zake* in autumn and snow-viewing *yukimi-zake* in winter.

The taste of sake largely differs depending on its serving temperatures. Sake cooled to 5 C is known as *yukibie* (chilly like snow), and warmed sake is called *kan*. Temperatures of *kan* range from about 30

C (*nuru-kan* or tepid) to 55 C (*tobikiri-kan* or exceptionally hot). In other words, Japanese enjoy drinking sake at a temperature best suited to enjoy the flavor of sake they have chosen. Table 2 shows names of sake conditions according to serving temperatures.

Sake's consumption in our country has been decreasing in recent years, and domestic consumption in 2005 was 730,000 kiloliters. But the number of sake breweries in operation is about 1,300, scattered throughout the country. Sake's importance remains unchanged as it supports local economies and continues to underpin the country's culture. **JS**

Table 2 Names of sake conditions according to temperatures



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*Sweetness=sugar (g/dl) – acidity (ml: titration of 0.1N alkali solution taken to 10ml sake)
Richness=0.42 × sugar (g/dl) + 1.88 × acidity (ml) -4.44