

# Sake



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## History

Sake is a rice wine and it is the national drink of Japan for centuries and at one point in the early times, Chinese make it too. It was brewed as early as 4,800 B.C. in the Yangtze Valley (now in China). It is made from rice, koji, water and yeast. Ever though Sake is a rice wine, it is a beer because of the grain (rice) and it has alcoholic content of 2 to 3x higher then Beer (11% to 18% alcohol).

In the beginning of Sake, in 4,800 B.C., there was no cultured yeast. The Japanese obtained a recipe in 300 A.D. Which clever Japanese the invented a “Kuchikami no Sake” or “Chewing in the mouth Sake.” The whole village, in ceremony, gather the chew up rice, chestnut and millet and regurgitate in to a vat. That started the yeast and starts the fermentation. Sometime later, a baker accidentally discovered the invented techniques to the yeast and preserve for the future use.

Before the 8<sup>th</sup> Century, the brewed was for personal use. After that period, mention is made of a being manufactured for general use. In the 14<sup>th</sup> Century, the bulk commodity and government taxed for sake as a marketed and traded because its consumption as the resulting revenues, tended to grow steadily. Up to the 19<sup>th</sup> Century, Sake was the main alcoholic beverage in Japan until western wines; beers and distilled liquor were introduced.

In many small brewers, they put up a display of the traditional insignia of their trade. A Large Ball made of Cryptomeria Leaves as seen below.



Sake has played and continues to play an important roles in Japanese culture and religion including almost all Shinto ceremonies, served at wedding, Christian of building, new houses and purchased land.

Sake production starts with polishing rice. Some brewers polish the rice up to 50% of the original size, the “Heart” of the kernel, to yield better sake. Then it is washed, soaked and steamed. Then add koji, water and yeast and the fermentation is started. After about 20 days, the liquid is separated from the solid and bottled. Sake is a cloudy liquid. Home made sake and most manufactured sake is consumed soon after production and up to 8 to 12 months before it goes bad. It is not suitable for aging, which is not a crucial factor to flavour, as is the case with western wines. If you pasteurize the Sake, it will last longer but it will have a little different flavour in

the Sake. The solid matter is then used in the making of other food products, especially pickles which are a constant companion to any Japanese-style meal.

Sake comes in varies array of qualities. It is similar in evaluation to wine for the range from clear to light amber, brilliant or dull and different smell in fragrance and aromas. A

fine sake is well balance. That is sweetness and dryness, pleasing acidity, bitterness, astringency and alcohol. There are many different aromatic including smell of apples, bananas, strawberries, melon and other fruits. When you sip and hold in your mouth while the flavour and aromas explode in the air. When you exhale, a secondary fragrance you smell and it is called fukumi-ka. Sushi and Sashimi are meant for high quality and refined sakes. When the bottle of Sake is open, it is advisable to consume fully because it does oxidize over time but not as quickly as wine.

Sake is drunk, of course, with a meal and one customs is that the rice is not served until the diners stop drinking sake as it is deemed redundant to drink and eat rice at the same time. Generally goes well with fish and vegetable dishes, particularly those of Junmai quality. Grilled salmon or pork dishes are better with fuller styles such as Gekkeikan, Ozeki and Halutsuru. Sweet, unfiltered sakes, Yamahai and Omachi, should be enjoyed as dessert. Sake is also, needless to say, apart from meals as well including the long tradition of “moon viewing” or “poetry” parties which saw the bottom of many a bottle of sake.

Sake is better served cold or in ice in special serving vessel, a sake flask called tokkuri and drink in a small sake cups, called guinomi or served in square wooden cup so that the smell of the fresh wood mixes with the smell and tastes of the sake. When the Sake is served lukewarm, you can taste the presence of minor taste flaws.

## Recipe

Following is one of the simple Sake brewing procedures for making Sake:

### Materials:

1500 g (3.3 lb)	Rice ( <i>Oryza sativa</i> )
400 g (0.9 lb)	Koji ( <i>Aspergillum oryzae</i> )
0.5 g (0.02 oz)	Citric Acid or equivalent amount juice of Lemon or Lime
4 litres (0.9gal)	Water
5 g (0.18 oz)	Yeast: you can use wine/champagne yeast, bakers yeast, and lager/ale/beer yeast. All will produce a very pleasant flavour indeed.

### Equipment:

- Electric rice cooker (steam cooker is better).
- Basket to cut water.
- 10 litres (2.6gal) enamel or stainless steel deep cooking pot with lid.
- Big spoon (stainless is better).

### Procedure:

1. Wash and soak the 1500 g (3.3 lb) rice for about 5 hours and then put the rice in a basket for at least 20-60 minutes to drain the water.
2. Cook the rice with 1800ml (0.48 gal) water using the rice cooker. Steam cooking is recommended for better taste.

3. After cooking, cool down the rice to 30 degree C (86 degree F).
4. Mix the citric acid with water in the enamel cooking pot. Citric acid will prevent contamination by bacteria and add a slightly sour taste to your Sake. Depending upon your taste, you can reduce the citric acid. Also you can use lactic acid or a lemon or lime juice.
5. Add 400g Koji and mix well by agitating with the big spoon.
6. In 30 minutes, add the cooled cooked rice and mix well by agitating with the big spoon.
7. Add the yeast, place the lid on the pot and keep it at room temperature (lower than 25 degrees C or 77 F). Lower temperatures will cause slower and longer fermentation and will result in a better taste.
8. Stir it at least once a day. In two or three days you can enjoy a very nice Sake aroma. Be careful about bacterial contamination.
9. In two weeks, Day 17, fermentation will seem to end.
10. After Day 20, Filter the sludge using a sterilized basket, cheesecloth or nylon straining bag and pasteurized and bottled.
11. Enjoy the filtered Sake. Do not drink too much. Alcohol content is two to three times more than beer. Cooling the filtered Sake is the best way to taste it. If you want crystal clear Sake, separate the remaining sludge by decanting. This will greatly reduce the Sake yield.
12. The remaining sludge can be used to make pickled vegetables in a refrigerator.
  - A cucumber is the most suitable vegetable. Before pickling, sprinkle lightly with salt (about 2% weight of the cucumber) and place the cucumber in a dry container under two times it's weight for at least 2 days to squeeze out any excess moisture. Then immerse in the sludge and in two or three months, you will have sake-tasting pickles. You can also put in white fish meat and then grill it. If you put soybean cake (tofu) wrapped with cheese cloth into the sludge, in a week you will get a cheese like sake tasting food. The longer fermentation, the better the sake-cheese likes taste.

## **Pasteurizing:**

Sake that is stored with yeasts still alive in the bottle may be unstable and not preserve well. Pasteurizing can stabilize sake, this process requires GENTLY heating the strained brew in a saucepan for 5 minutes at 55 degrees C (132° F), and this will slightly change the character of the drink. Allow the sake to cool before bottling. This bottle will be now good for many years while it remains unopened. Generally sake will improve for the first few months after bottling. Leave it for at least a week after pasteurizing before drinking. Any sterile sealed bottle will work well for storing Sake. Store in a dark place as light does not agree with Sake. One can choose not to pasteurize, however be sure to keep the Sake refrigerated at all times to preserve it well.

## Supplies

Most of the Chinese and/or Japanese Grocery Store will carry good rice for making sake and some carry koji.

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