

How to brew
Japanese Sake Doburoku 濁酒
In the Kitchen

A guide to brew *DOBUROKU* (unfiltered, unpasteurised cloudy Japanese Sake) at home

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(Brewers Choice)

To reduce the risk of contamination and food poisoning, please make sure your cooking equipment and environment are kept clean and sanitised at all times.

If in doubt about the quality of Sake you are brewing or have brewed, discard it immediately (bad smell or unusual colours).

Enjoy happy and safe brewing!

What makes Sake?

Koji 1 麹

Aspergillus Oryzae

A type of fungus grown on rice, other grains and soybeans, which secretes enzyme called Amylase. Amylase is responsible for converting starch to sugar

The key player in making sake, miso, soy sauce and other fermented food.

Moto 2 酏

Saccharomyces Cerevisiae

Starter culture containing yeast for alcohol fermentation

1. Cultured from Rice, *Koji* and Water (traditional method)
2. Use cultured yeast *S.Cerevisiae Sake, Ale yeast* or *yeast for baking*
3. Successful *Moromi* (see below) can also be an excellent *Moto*

Moromi 3 醪

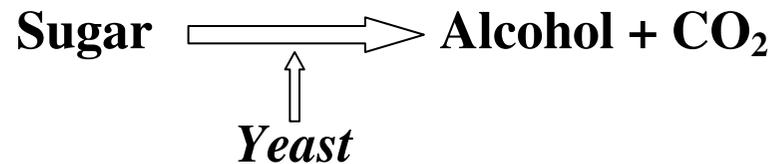
Sake mash, which is a mixture of *Koji*, steamed rice, water and *Moto* (or yeast)

Fermentation generally takes 2 -3 weeks depending on the ratio of the mash, temperature and the environment.

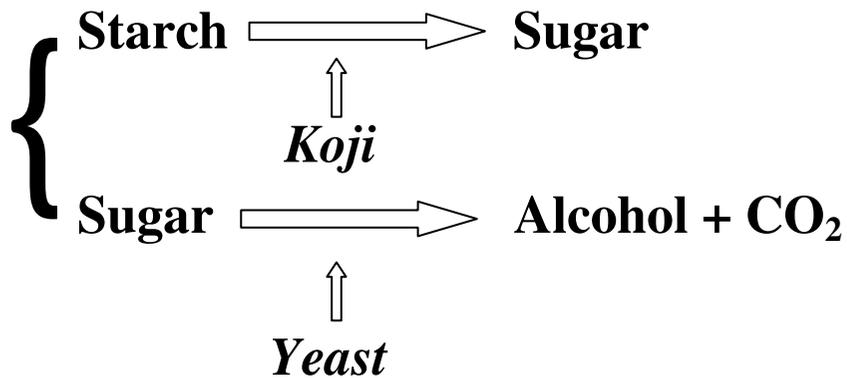
Moromi can be enjoyed as is without filtering, pasteurising at any point of fermentation (*Nama Sake* fresh sake) or bottled and aged in the fridge.

Alcohol fermentation

Basic alcohol fermentation



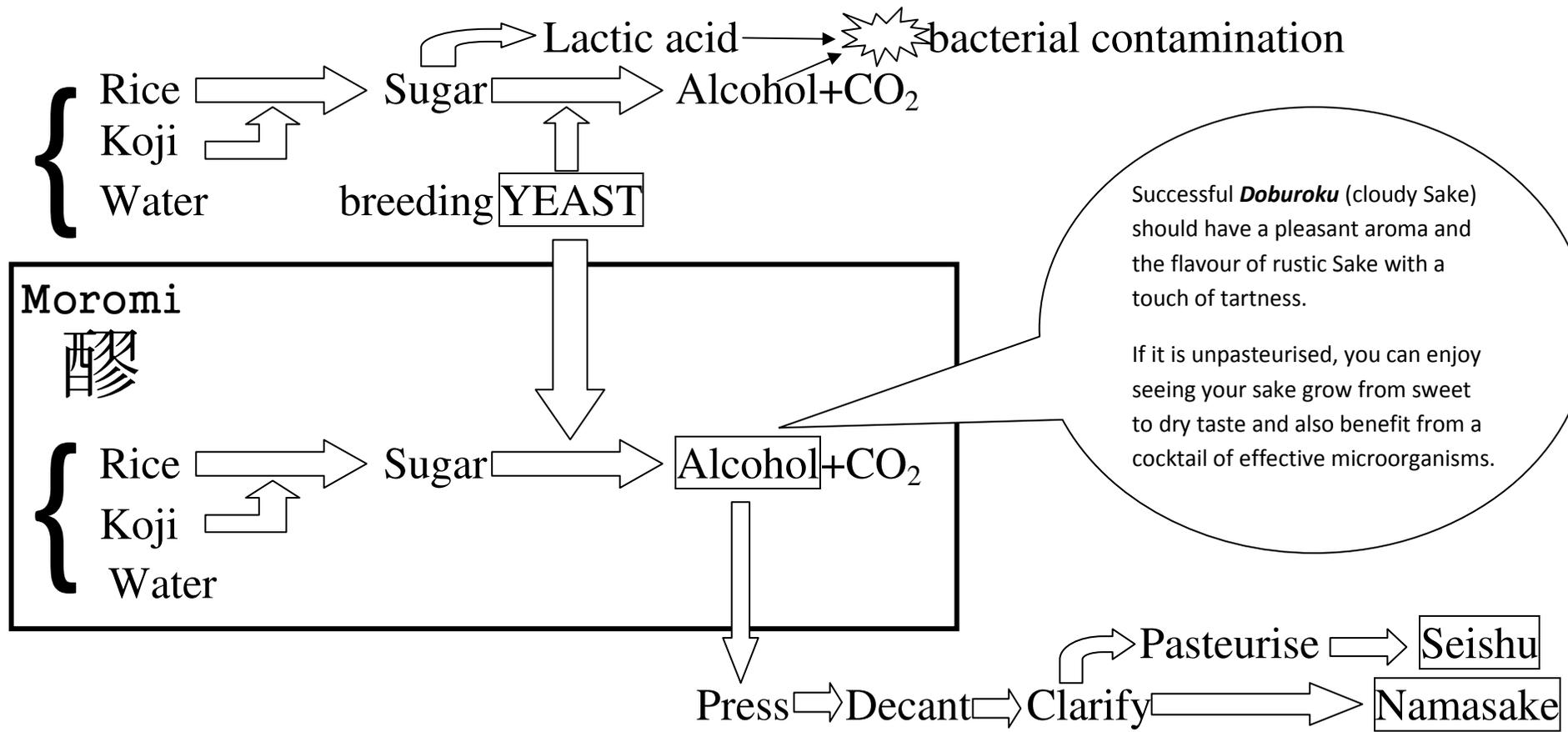
Sake fermentation *Saccharification and alcohol fermentation take place simultaneously until the fermentation process ends



The process of Sake brewing

Moto

酀元



How to culture 麹 *Koji* at home

(1kg rice makes approx.1.2kg of Koji)

Equipment

Bowl
Strainer
Bamboo steamer and a pot
Clean tea towels

Ingredients

1kg medium grain rice (organic brown rice or white rice)
2g *Koji* seeds (*Tane Koji*)
Clean filtered water

Method

1. Wash rice well in clean filtered water.
2. Soak in the water for at least 6 hours to 24 hours
3. Drain water for 10-20minutes
4. Steam rice on the tea towel in the steamer(s) on high heat for 60-70 minutes (keep the water level)
5. Turn over and separate rice grain half way through
(while steaming, be very careful so that you do not scorch yourself)
6. Spread steamed rice over the tea towel and let it cool down (25-30 degree C)
7. Sprinkle *Tane Koji* with clean hands and stir well
8. Wrap with the tea towel and keep the parcel in the oven (use bread fermentation function) or cooler box with heat source of your choice
(the ideal temperature should be between 38-40degrees C)
9. Keep it warm and moist for 2-3days, break any lumpy grains from time to time to aerate
10. Break lumpy bits and separate grains, store in an air-tight container.
Store *Koji* in the fridge (or freezer) for *Moromi* preparation.

Australian rice is excellent for making Koji as the grains are not sticky, but takes longer to steam compared to Japanese rice. Well steamed rice should be al dente. The texture should be smooth with a play-dough consistency without stickiness when squashed between your fingers. In order for Koji mould to form a colony, it requires oxygen and space between grains, so it's important to aerate (ventilate) and separate grains.

You may need to spray water to keep the wrapping moist if grains are drying.

Koji can be kept in the fridge for a few months in a sealed container, and can even be kept frozen for longer.

Doburoku

濁酒 Recipe

Designing Moromi

Koji and Steamed rice ratio=1:1 (half and half)

Brewer's yeast (without Moto)

Aim approx. 16% alcohol content

Equipment

- 1 Glass jar (sterilised)
- A long spoon or a ladle (sterilised)

Ingredients

- 200g white or brown rice (makes approx.280g of steamed rice)
- 200g white or brown rice for Koji (makes approx.240g of Koji)
- 800ml filtered water (double the amount of the total weight of uncooked rice)
- A pinch of brewer's yeast

Options*¹: Lemon juice, Yoghurt, citric acid

How to prepare *Moromi*

1. Clean and sterilise the glass jar
2. Pour water into the jar
3. Add steamed rice
4. Add Koji
5. Sprinkle brewer's yeast
6. Stir the content with a sterilised spoon
7. Put the lid loosely to allow CO₂ to escape
8. Keep *Moromi* at 21-24 degree C
9. Fermentation starts 1-2day and continues for 2-3 weeks

} in any order
(add options*¹)

While fermenting alcohol, produced gas needs to be released from the jar so that the glass won't be cracked or shattered. At the same time, make sure it won't invite fruit flies or other insects into *Moromi*. When the fermentation process comes to an end, bubbles settle, however, the process is likely to continue quietly for a while. So it's wise not to over-tighten the lid on the bottle, or use a PET bottle for soft drinks.

If your *Moromi* starts giving an unpleasant smell, it indicates some bacterial contamination. Please discard it and start again. Sterilising your equipment is crucial.

Moromi and after

Option 1.

Chill and drink straight away

Option 2.

Follow the formality of Japanese Sake making process

Press

1. Filter through strainer
2. Filter through a cloth bag without squeezing

Sake lees make an excellent *Moto* starter for your next batch of *Moromi* preparation

Pickle or preserve meat, fish or vegetable

Add to your bread dough for deeper, richer and more complex flavour development

Decantation

Decant without disturbing sediment

Clarification

Charcoal is used to clarify Sake (the real sake made from 100% natural ingredients present yellowish liquid colour)

Pasteurisation

Use a double boiler to keep the liquid temperature of 50-60 degree C for 5-10 minutes



Ingredients can be obtained at all Brewers Choice Stores:

Browns Plains, Chapel Hill, Enoggera, Kedron, Wacol, Yamanto

www.brewerschoice.com.au