

### Sake Brewing: Part Three

In order to produce delicious sake, high-quality yeast is very important. Before the fermentation begins, the brewers prepare a starter ferment known as the “base” (*moto*) or the “sake mother” (*shubo*). The *shubo* is a mixture of water, yeast, rice, and *kōji* mold. Enzymes produced by the *kōji* microbes break the rice starch down into simple sugars, which the yeasts consume. For the yeast to survive and thrive, the *shubo* needs to be acidic. This acidity, created by adding lactic acid or lactic-acid-producing bacteria, kills microbes that would eat the yeast and *kōji*. The *shubo* is then combined with more steamed rice and water in a three-stage fermentation process known as *sandan shikomi*. By changing the temperature in the fermentation vat, the brew master can control the rate of fermentation and affect the flavor profile of the sake. Complete fermentation typically takes two to four weeks, but it can take longer if temperatures are kept particularly low.

Once the main ferment, known as *moromi*, is complete, it is filtered through a cloth to remove the sake lees—a sediment made up of unfermented rice. The filtration was once performed using a sake press called a *sakafune*. In more modern processes, the sake is pressed out using a machine. Some of the fanciest sake is filtered by gravity, a time-consuming process that only produces a small amount of sake.

After the initial filtration, some sediment may remain. To remove this sediment, the sake can be filtered again, or the sediment can be left to create either *origami* or *nigori*, two types of cloudy sake. Final adjustments to the color and flavor can be made by adding persimmon tannins to the sake or filtering it through activated charcoal.