

## **Kombucha**

What is Kombucha? Simply put, it's fermented sweet tea. Homebrewed kombucha is vitamin rich, delicious and loaded with enzymes that may help with digestion. Some health claims appear to be overblown, but the best way to test them is to drink it and see how it makes you feel.

### **SINGLE BATCH**

#### **Equipment**

- Large pot
- 1 quart vessel with large opening
- Wooden Spoon
- Plastic fine-mesh strainer
- Sealing jar/bottle for secondary fermentation
- Coffee filter or cloth
- Rubber band

#### **Ingredients**

*Makes 1 quart, recipe scales well*

- 1/4 cup sugar (best to use cane sugar unless you have a spare SCOBY hanging around)
- 1.5 t tea of your choice (or 2 tea bags)
- 1/4 cup-1/2 cup finished kombucha (starter tea)
- SCOBY

#### **Basic Process**

1. Heat 3 cups of water. Do not let it boil.
2. Dissolve sugar in water while it's still warm.
3. Add your tea, and allow it to steep.
4. Add 4 cups of room temperature water and stir, thoroughly.
5. Once tea is at warm room temperature, strain out tea leaves and pour liquid into your fermenting vessel.
6. Add SCOBY and finished kombucha tea (from last batch).
7. Cover and secure a cloth to the top of your container.
8. Let it sit in a warm place for 3 days to 2 weeks.
9. The longer you let it sit, the less sweet it will be. It's done when you like the way that it tastes.

### **CONTINUOUS BREW**

#### **Equipment**

- All equipment needed for single batch except vessel
- Glass or ceramic vessel with a bottom spigot

#### **Ingredients**

*Makes 1/2 gallon, recipe easily scales*

- Sweetened tea, prepared as written above
- 5 cups finished kombucha tea
- SCOBY

#### **Process**

1. Into a vessel with a bottom spigot, pour the finished kombucha tea.
2. Add the SCOBY and 1 cup of the cooled, sweetened tea.
3. Store the remaining sweet tea in the refrigerator.
4. Cover the mixture and let sit at room temperature. Taste daily until it reaches your desired acidity (probably one to two days).
5. Once the tea tastes right, start drawing off a set amount daily or every other day, for bottling or drinking.
6. Add the same amount of tea from the refrigerator as you drew off.
7. Repeat at regular intervals, always replacing what you draw off with a like amount of sweet tea.

## **SECONDARY FERMENTATION AND BOTTLING**

Secondary fermentation refers to the fermentation that occurs after the “finished” tea has been drained away from the SCOBY. During this time, sugars will continue to decrease and nutrients will continue to increase. This is also a great time during which to add flavors and fizz.

**FLAVORS** - Flavoring kombucha with just about anything is a simple process. Liquids, such as juices, can be added at bottling, but mashed fruit, whole berries and sprigs of herbs work great, too!

**FIZZ** - I gotta be straight: without added carbonation - like many store brands use - there is not much of a guarantee that you'll get loads of fizz, but there are tricks that will improve the odds.

Continuous Brew - If I'm not up for a secondary fermentation, I find my brews much more bubbly when I do continuous than when I do single batch

Secondary Fermentation - For most people, this leads to the right amount of carbonation, especially the kombucha is placed into airtight containers during secondary.

Temperature - Warmer temperatures during primary fermentation will help with some fizziness.

Sweetness - Adding a bit of sugar (just a pinch) at bottling can give the microbes a bit of CO2 creating food.

**BOTTLING** - A bottle that is intended to keep the fizz in is your best bet. Reuse store-bought kombucha bottles, Grolsch bottles, 360 vodka bottles and old soda bottles. **Bottling in glass can be seriously dangerous. (Let's discuss!)** You can also find great containers at Philly Homebrew Outlet, Fantes or online at Fillmore Container and Midwest Homebrew Supply.

## **GENERAL TROUBLESHOOTING AND FAQs**

**Temperature** - Temperature is one of the most important aspects of fermentation. Kombucha prefers a warmer temperature for primary fermentation (72°F to 80°F, in my experience) . Too cool, and fermentation might become sluggish or completely stop. Too warm and you end up with a rapid fermentation that can throw the balance of yeast and bacteria out of whack or even kill essential yeast or bacteria.

**Water** - There are things chemicals in city water that are bad for fermentation, but that doesn't mean they aren't there in bottled water, too. Chloramine is chlorine + ammonia and it is in Philly water. You can't boil it out and it can impact fermentation. I have used Philly water for virtually all of my ferments, much of it run through a charcoal water filter (Mavea) and some of it not. I've never had batch that failed to ferment. Here's a link to what the city puts in our water, if you're interested:

[http://www.phila.gov/water/Fact\\_Sheets.html#fact13](http://www.phila.gov/water/Fact_Sheets.html#fact13)

**Alcohol** - Yes, there is alcohol in kombucha. There's a small amount, and there can't be a large amount unless you try really hard. Nonetheless, there are ways to lower alcohol. Stick to drinking it fresh (before bottling) and keep primary fermentation brief.

**SCOBY care** - When your SCOBY is not in use store it in room temperature kombucha. Do not store it in the fridge. SCOBYs will keep almost indefinitely with monthly feedings. Try to feed it fresh, sweet tea at least once a month.

**Exploding** - This is serious risk during the bottling stage. Put bottles in coolers or bags if you're leaving your bottles at room temperature for more than a day.

**Alternative Sweeteners** - Feel free to play around with alternative sweeteners during secondary fermentation. For primary fermentation, stick to cane sugar unless you're using a spare SCOBY.

## **GLOSSARY**

**SCOBY** - Symbiotic Community of Bacteria and Yeast. The culture used to make Kombucha.

**Starter Tea** - This just means finished, unflavored kombucha. It's used to acidify a new batch and add necessary microbes.

**Further Resources:** [microbialfoods.org/](http://microbialfoods.org/), *True Brews*, by Emma Christensen, *Kombucha Revolution*, by Stephen Lee and Ken Koopman, *Kombucha!* by Eric and Jessica Childs

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