



Kombucha



This handout will cover the basic information and for making kombucha at home. If you have a question about anything, please don't hesitate to call us, send us an email, or stop in to the shop!

Kombucha is a fermented tea beverage. With flavors ranging from subtly sweet to tart to “funky” to vinegary, each brew is uniquely its own and that variability stems from the SCOBY living in each batch.

Kombucha Quick Facts:

- 1. SCOBY** (Symbiotic Colony of Bacteria and Yeast). A SCOBY consumes sugar and other compounds in the brew and produces the various flavors found in Kombucha. Each SCOBY is slightly different, sometimes made up of a combination of the following bacteria and yeast:
 - ◆ **Acetobacter**: A strain of bacteria in every batch of Kombucha; found in vinegar and produces vinegar flavor in kombucha.
 - ◆ **Saccharomyces**: A common yeast strains found in kombucha. These yeasts eat sugar, producing alcohol and CO2 as waste products.
 - ◆ **Brettanomyces**: This is another yeast strain you might find in your kombucha and helps produces the “funky” (or barnyard/horse blanket) flavor in kombucha.
 - ◆ **Lactobacillus**: A bacterial strain that produces lactic acid, which produces a tart and acidic flavor.
 - ◆ **Zygosaccharomyces**: A yeast first isolated from kombucha. It produces alcohol and CO2.
- 2. Kombucha contains alcohol**
 - ◆ Every batch of kombucha contains some alcohol as a result of the fermentation process, yeast consuming sugar and producing alcohol (and CO2). Most batches will contain 0.5% ABV or less, which is considered non-alcoholic by FDA standards.
- 3. Kombucha contains sugar**
 - ◆ Although 1 cup of sugar is used in a 1 gallon batch of kombucha, the SCOBY consumes a substantial amount of that sugar. There is still some sugar remaining in the finished kombucha, typically around 8 grams of sugar per 16 ounces of kombucha.
- 4. Kombucha contains caffeine** if brewed with caffeinated tea
 - ◆ Kombucha made using caffeinated tea contains caffeine. However, the amount of tea used in a batch of kombucha often equals half of that found in a regular cup of tea.
- 5. Common teas** used in kombucha brewing:
 - ◆ Black tea (caffeinated) ◆ White teas (caffeinated) ◆ Herbal teas (caffeine-free)
 - ◆ Green tea (caffeinated) ◆ Oolong teas (caffeinated)
- 6. It is best to use glass or stainless steel** (304 grade or better) when brewing kombucha
 - ◆ Glass and stainless steel are ideal for kombucha brewing because they are non-reactive, durable, and easy to keep clean and sanitized.
- 7. You can use a no-rinse sanitizer**
 - ◆ StarSan or One Step are “no-rinse” sanitizers (meaning you do not have to rinse off its residue) designed specifically for homebrewing and are an excellent choice for a no-rinse sanitizer. It's low pH will not adversely affect the SCOBY and it will not affect the flavor of the kombucha. Otherwise, you can use white vinegar.

Equipment:

- Primary Fermentor: Usually a wide-mouth 1-gallon glass jar with lid
- Sanitizer: We recommend StarSan, an easy to use, no-rinse sanitizer to kill microbes and leave a clean surface. OneStep and Iodophor are also good options. Sanitize everything that will come into contact with the kombucha *after* the boil!
- pH Test Strips: To check pH of final kombucha pH
- Pipet / Straw: To take taste samples

Optional Equipment:

- ◆ Swing-top Bottles
- ◆ Reusable Tea Bag
- ◆ Bottle Filler
- ◆ Temperature Strip / Thermometer
- ◆ Cotton cover / cheesecloth
- ◆ Bottle Brush
- ◆ Racking Cane / Auto-Siphon
- ◆ Siphon Tubing

Ingredients:

- ◆ SCOBY
- ◆ Tea
- ◆ Sugar
 - Table Sugar
 - Raw Cane Sugar
 - Evaporated Cane Juice
 - Honey / Maple Syrup / Agave / Fruit Juice

Quick-Start Kombucha Brewing Directions -- 1 Gallon Batch

1. **Sanitize** any equipment that comes into contact with the kombucha after the tea is steeped and the sugar is added.
2. Bring 4 Cups of water to a boil. Once you achieve a boil, turn off the heat.
3. Steep 3 - 4 tablespoons of loose-leaf tea (or 6 - 8 tea bags) in the water for 5 - 8 minutes. Remove tea/tea bags.
4. Add 1 cup of sugar and stir until completely dissolved.
5. Pour brew into 1-gallon wide-mouth jar.
6. Add cold tap water to bring the liquid level in the wide-mouth jar up to about 2 - 4" from the top of the jar.
7. Make sure the brew is between **85 and 68F**. It is vital that the temperature of the brew be at this temperature to prevent damage or death to the SCOBY.
8. Add SCOBY (and any "starter tea") to the wide-mouth jar.
9. Place the brew in a warm place, where it can maintain a 68-80F temperature (ideally 75F)..
10. After 7-21 days, your kombucha is likely ready to bottle and drink.
 - If you'd like, you can take a pH measurement to determine if the kombucha is done fermenting. The pH of finished kombucha should be 2.5- 3.5. (Use color chart provided with pH strips to determine pH.)
 - You may also take a sample of the kombucha to taste using a straw. Dip the straw under the floating SCOBY, cover the top of the starw with your thumb, and pull the straw / sample out.

Reusing your SCOBY & "Starter Tea"

- ◆ You can continue to reuse your SCOBY for a number of batches. Simply keep the SCOBY in a "starter tea." Starter tea is just ~1 Cup of fermented kombucha.

Bottling Kombucha

- ◆ We recommend using swing-top bottles for bottling your kombucha because swing-top bottles' glass is thick enough to handle higher carbonation levels.
1. Bottle your kombucha in swing-top bottles a day or two before it is fully completed fermenting. Or, you can "bottle prime" (common in homebrewing) the kombucha by adding a small amount of sugar back to the completely fermented kombucha. Ask us at The Shop more about this process if you're interested!
 2. Let bottles sit in a warm place for 2-4 days.
 3. Move bottles to the fridge to chill, and once chilled, enjoy!