

KOMBUCHA



Kombucha is a lightly effervescent, cider-like beverage made by fermenting sweetened tea. It is produced using a starter culture of bacteria and yeasts called a SCOBY (*Symbiotic Colony of Bacteria and Yeast*). A mature SCOBY resembles a flat, jelly-like pancake, often referred to as a ‘mushroom’ or ‘tea fungus’

due to its unique appearance, although it is not a mushroom.

HOW IS KOMBUCHA MADE?

Maintain safe and hygienic practices, such as following proper steps and keeping a clean environment, to minimize the risk of contaminants like molds or harmful bacteria that could cause illness. Always wash hands thoroughly and rinse with kombucha or vinegar before handling the SCOBY.

First, obtain a SCOBY and starter liquid, either from a friend’s mature starter or purchased fresh online. The SCOBY and liquid are added to a food-grade vessel of brewed, cooled, sugar-sweetened tea, then lightly covered and allowed to ferment at room temperature, typically for 7 to 10 days but possibly up to one month.

The liquid acidifies the tea to ensure a safe pH level and minimize contamination, while the sugar feeds the bacteria and yeast, producing an acidic end product that tastes somewhat like cider vinegar, typically with slight carbonation and trace amounts of alcohol. Fruit juice or other flavorings can then be added as desired.

INGREDIENTS FOR 1/2 GALLON

- 1/8 cup green or black tea (*in mesh bag*), or 2-4 tea bags
- 1/2 gallon of filtered water
- 1/2 cup cane sugar
- 1 cup Kombucha Starter Liquid (*from a previous batch*)
- 1 SCOBY

EQUIPMENT

- Tea kettle or pot, for heating water
- Brewing vessel, safe for fermenting (*i.e. large glass jar, stainless steel, food grade plastic*)
- Clean fine weave cloth, towel, or coffee filter (*large enough to cover brew vessel*)
- Rubber band (*wide enough to fit around brew vessel*)
- Bottles or jars, for finished kombucha
- Funnel (*optional*)

INSTRUCTIONS

- 1.** Boil water. In a brewing vessel, pour in 2 cups of water to make strong tea. Steep the tea for 10-30 minutes.
- 2.** Remove the tea leaves or bags. While the water is still hot, stir in sugar and dissolve completely.
- 3.** Allow the sweetened tea to cool to room temperature. You may add the remaining 4 cups of filtered water to the brewed, sweetened tea to speed up cooling. Once it has cooled to room temperature, with washed hands, add the SCOBY and 1 cup of Kombucha Starter Liquid to the sweetened tea.
- 4.** Cover with a clean cloth or coffee filter (kombucha-specific lids can also be

purchased commercially). Secure with a rubber band or bungee cord to keep out insects and contaminants while allowing airflow. Record the start date.

5. Allow the kombucha to ferment at room temperature (ideally 64-79°F/18-26°C) for 7-14 days. A new SCOBY will develop on the surface of the liquid, starting as a light haze that gradually turns whitish, then opaque and thicker over time. Check the kombucha flavor after a week and stop fermenting when you like the flavor.
6. To “stop” fermenting: pour the kombucha into clean jars or bottles sanitized by rinsing with boiling water or vinegar, retaining the SCOBY and at least 1 cup for your next batch. Save more, at least 20%, if following the continuous brew technique (see below).
7. Flavor the finished kombucha as desired with 10-20% juice or clean fruit and experiment with fresh herbs and spices based on your preference. Fresh ginger, lemon peel, and cinnamon stick are favorites. Cap tightly. Leave at room temperature for 1-3 days for potential carbonation or refrigerate immediately.

CAUTION: A longer time capped at room temperature could result in carbon dioxide accumulation and even explosion of the contents. It is wise to keep a close watch, especially if the weather is warm.

REPEAT BATCHES

WITH CONTINUOUS BREW TECHNIQUE

To minimize handling the SCOBY and reduce the introduction of contaminants, it's best to leave the SCOBY and starter liquid in the vessel and not wash the vessel between uses, unless it becomes built up with yeast. Gently pour in new sweetened, cooled tea along the inside of the jar to limit disturbing the SCOBY. SCOBY growth can be peeled and shared with others or stored for several weeks in a similar cloth-covered vessel, topped off with kombucha. This is sometimes referred to as a SCOBY Garage.

- For safety, both homemade and commercially prepared kombucha should be stored in the refrigerator.
- The historical origins of kombucha date back thousands of years to ancient Asia.

REFERENCES

Information taken primarily from “*Understanding and Making Kombucha*,” Food Smart Colorado, Nutrition, Food Safety, and Health Resources from Colorado State University Extension 2020

Kombucha brewing under the food and drug administration model food code: Risk analysis and processing guidance. Number (2013). *J Environ Health* 76(4):8-11

LOCAL CONTACT

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