

Kombucha – The Art of Fermenting Tea

Kombucha is a sweet, fermented tea. It's one of those healthy live foods that make you sure you're doing the right thing with every sip. It's light, refreshing and better for you than soda (though it does contain sugar, caffeine and a small amount of alcohol).

If you haven't tried it yet, buy a bottle and see if you like its bright not-too-sweetness. If the answer is yes, you may soon find yourself spending more than you'd like on fancy bottles of "booch." When that happens, take the next step and brew your own. It's easier than you think.

Start with the basics until you get the hang of it. We'll show you how to put your own spin on it later.

Note: Pregnant or nursing mothers and people with compromised immune systems may want to check with their doctors before drinking live cultures.

See Cook's Note on learning more about the art of fermentation.

Get a SCOBY (Better yet, Grow your own)

That's shorthand for **Symbiotic Colony of Bacteria and Yeast**, a magic bullet of live cultures that'll start your Kombucha fermenting. You can ask around and see if anyone has an extra SCOBY, or order it from an online source.

Or, you could be a little punk rock and brew your own. Here's how:

Ingredients

- 3 cups water (tap is fine)
- 1/4 cup granulated sugar
- 2 bags green or black tea (plain, unflavored, 100 percent tea leaves)
- 1 cup store-bought kombucha (raw, unflavored, unpasteurized)

special equipment

- 1 clean glass quart jar (no need to sterilize)
- Cheesecloth or clean dishcloths
- Rubber bands
- 1-2 bottles with high tensile strength (optional for second ferment – see below)

Make some sweetened tea by bringing the water to a boil in a saucepan and stir in sugar until it's dissolved. Throw away the paper tags from the tea bags and

toss the bags into the pot. Take the pan off the heat and let the tea steep until it's your perfect drinking strength. Throw out the tea bags and let the tea cool to room temperature. (If you're in a hurry, you can cool the pan in an ice bath or brew super-strong tea and add some cold water. But kombucha calls for a little Zen. Take your time with the cultures and get to know them.)

Pour cooled tea into a quart jar and stir in the store-bought kombucha. Cover the jar with a triple-layer of cheesecloth or a dishcloth and secure it with a rubber band. Tuck the jar in a warm corner. Kombucha is happiest at around 75 to 85 degrees, so keep it warm and out of drafts or direct sunlight.

In about a week, you'll see some bubbles and a thin film forming on top of the liquid. Remember, this is a live culture. It might take a little bit longer, or the tea may look a little cloudy or globby. This is a good sign. It's the beginning of your SCOBY.

Now the fun starts. Taste it every day to check its progress (to check on the level of tartness). Be patient; it can take up to a few weeks for the SCOBY to fully form. It's ready when the film is about 1/8-inch thick and you can easily lift it with a spoon. You might notice little brown strings of yeast hanging underneath the SCOBY. It's all good.

If you see fuzzy mold, it's not good. Throw it out and start again. (See KOMBUCHA PRIMER below for other concerns.)

It's kombucha!

Congratulations! You now have your first batch of kombucha. If you like the way it tastes, set some aside to start your next batch, strain the rest, refrigerate and enjoy. If it's too sweet, put the SCOBY back in and let it ferment a little longer. If it's too sour, brew some more sweetened tea, let it cool and stir it in. Remember, you can always adjust the sweet/sour blend of kombucha by adding more sweetened tea or fermenting longer. It's up to you.

Make more — and start your very own SCOBY hotel

Now that you've got your very own SCOBY, you can brew as much kombucha as you want, as often as you like. Here's how to make more:

Brew a batch of sweetened tea, just like you did the first time. Top it off with your new SCOBY and add some of the mature kombucha you made in the previous batch.

Every time you brew, a new SCOBY will form on top of the old one. Leave it there and let it thicken or — here's the cool part — peel it off and store in a separate container with a little liquid, covered with cheesecloth. Keep adding extra SCOBYs to the same container and top it off with some fresh sweetened tea every couple of weeks. Store it in a cool dark place. You have just created your very own SCOBY hotel. It will give you a stash of extras in case something goes wrong with a batch. (For important answers to what can go wrong, see below). And you can pass some on to friends, who will be hooked once they have a taste of your home brew.

Make it your own — A Second Ferment for Fizz & Flavor

Once you've gone a few rounds and feel your kombucha game getting strong, you're ready to take the next step and infuse it with flavor. It's simple — add things that taste good, seal the bottle and let it sit to develop some flavor and fizz. Try adding fruit, vegetables, juices, sweeteners, extracts, dried spices, fresh herbs, just about anything you think sounds delicious. There are no rules here, so you can't go wrong.

Well, there's one important rule. It's the bottles. You **MUST** use high-tensile-strength bottles. The second ferment creates fizz — carbonation. It's a disaster if the bottles aren't built to withstand pressure. They can burst and make a big mess. You can find high-tensile-strength bottles online (flip-top or other styles are available). You also can rinse and reuse the bottles your store-bought kombucha came in, or screw-top wine bottles. These may not be 100 percent airtight, so you'll get less fizz, but they'll still work just fine.

And there's another rule. Keep a closer eye on the second ferments than you did the first. Once a day, release a little bit of gas by slowly opening the top and letting some out. Safety first.

Here are some flavor combos to get you started:

Basil Pineapple

3 leaves basil

3 tablespoons pineapple juice

Spiced Apple

1/4 apple, peeled, cored and cut into thin sticks, about 1/4 heaping cup

3 black peppercorns

3 allspice berries

1 cinnamon stick
1 clove

Ginger Pear

1/4 pear, peeled, cored and cut into thin sticks, about 1/4 heaping cup
2 pods green cardamom, slightly crushed
1 nickel-sized medallion of peeled ginger cut into sticks
1 teaspoon maple syrup

Directions

For any one of the recipes above (or one of your own), place everything but the kombucha into a 480ml bottle (the size most store-bought booch comes in). Top off with about 2 cups of kombucha, leaving an inch of headspace for fizz and foam. Tighten lid and place bottle in a corner away from direct sunlight. After about 24 hours, slowly and carefully unscrew cap to release gas and have a taste. If you like the flavor, you're done. If you want more intense flavor or carbonation, leave it for another day. It's done when it tastes good. A second ferment typically doesn't take longer than a few days, a week max. When it's ready, strain and store in a covered glass container in the refrigerator.

These recipes also work for 750ml wine bottles if you increase everything except dried spices by 50 percent and top off with about 3 cups of kombucha. The fermentation time should be about the same.

A Kombucha Primer

- *I love it! But I'm running out too fast. Can I make a bigger batch?* Yes, just multiply the recipe for the yield you want and use a bigger container with a wide mouth.
- *Can I use less sugar or more tea?* Yes, you can dial the basic ingredients up or down to taste. Just make sure you add about 10 percent mature kombucha to each new batch to acidify it and get things going.
- *Do I need to sterilize my jars?* No, just work clean — wash your hands, make sure your utensils, jars and pots are all clean. You don't want soap or little pieces of food getting into the mix, because they can contaminate everything.
- *Can I ferment in cooler temperatures?* Yes, but it will take longer. If you want to brew in winter, there are a couple of hacks. Set your jar on or

near a radiator or on a high shelf. You also can set your jar on a heating pad, keeping it turned on as much as possible. (We do not recommend leaving the heating pad on while you sleep or are not home.)

- *How can I speed up the process?* Adding more mature kombucha to your new batch will jumpstart the process, and so will fermenting in a shallow container with a wide mouth.
- *Can I use metal?* Never. Because of its acidity, kombucha tends to corrode metal over time, even stainless steel. Glass or lead-free ceramic is best.
- *How long does it last in the fridge?* Technically, indefinitely, though it will eventually begin to ferment and the flavor will change.
- *Can I use honey or other sweeteners besides sugar? How about other types of tea or liquids?* Once you have the hang of it, go ahead and experiment. Worst-case scenario, your SCOBY dies. No worries. Fish out a new one and start again.
- *My SCOBY sank. Is this OK?* If some or all of the SCOBY does not float (some grow heavy and stay partly submerged) and a new film doesn't start to appear on top, it's no longer viable and should be thrown away along with the liquid.
- *How do I take care of my SCOBY hotel?* Make sure the SCOBYs are submerged in liquid and stored in a cool dark place. Check on them every couple of weeks and add sweetened tea to keep them going. If the container becomes too full of liquid or it gets super acidic, pour some out and add sweet tea to balance it out.
- *How do I tell if something's wrong with my SCOBY?* Anything fuzzy is mold and should be discarded along with all of the liquid. You do not want to eat or drink mold.
- *It smells weird. What's normal?* Kombucha should smell slightly acidic and vinegary. It should not smell rancid or moldy. If in doubt, throw it out and start over.
- *Colors.* The SCOBY gets thicker with each ferment if you don't separate the new from the old. It will also get more opaque and rubbery. Totally normal.

- *How do I add more carbonation to basic kombucha?* Do a second ferment in an air-tight, high-tensile-strength bottle for a few days while the kombucha is still fairly sweet. Remember to release a little bit of gas every day.

Cook's Note

Sandor Ellix Katz's book "The Art of Fermentation" is a comprehensive guide to fermentation practices all over the world, including kombucha. There are also lots of online resources and groups to join if you start to get really into it.

total time: 2-6 weeks

active prep: 10 minutes

serves: makes 1 quart

difficulty: medium if you have patience and like to wing it, difficult if you don't