



Kombucha

FAQ

What is kombucha and what does it taste like?

Kombucha is a fermented tea made by combining a Mad Millie Kombucha SCOBY (Symbiotic Culture of Bacteria and Yeast) with sweetened tea. It has vinegary/earthy/tangy notes to it which will change and develop as fermentation takes place. The flavour can be influenced depending on your second ferment process.

What is a SCOBY?

A Symbiotic Culture of Bacteria and Yeast, the physical scoby is basically a house for all the good bacteria and yeast that ferment kombucha. The slimy scoby is cellulose that is produced by the bacteria and yeast present in the starter culture, this is why the starter culture liquid in your Mad Millie Scoby or from your previous brew is so important, the microorganisms don't just live in the cellulose, they also live in the brew itself.

What do I need to make kombucha?

You will need a brewing vessel, tea, sugar and your Mad Millie scoby.

Does kombucha have alcohol in it?

During the fermentation alcohol is produced as a by-product. If you add the correct amount of sugar the alcohol level will be less than 0.5% at the end of your fermentation process.

Is my kombucha culture reusable?

Yes! During each ferment the mother scoby (the one you added) will produce a baby scoby. Every scoby can be used four times before it gets too old and needs to be discarded. With each batch of kombucha a baby scoby is produced and the process starts again, you will have a fridge full of scoby's before you know it.

How do I store the scoby's when not in use?

Store your kombucha scoby in 300 mL (10 US fl oz) of starter culture from your previous batch, in the refrigerator. If it has been stored for more than 2 weeks take it out the night before brewing and follow the below instructions.

Dissolve ¼ cup (50g) of white sugar in 250 mL (8.5 US fl oz) of brewed black tea. Allow to cool to room temperature before adding your starter culture and scoby. This will give the scoby a jump start to come out of hibernation. The next day follow the Mad Millie Kombucha How to Guide but you now have double the starter fluid so take this into account with your brewing vessel.

What type of sugar do I need to make kombucha?

White sugar will give the best results.

Do I have to add the sugar?

Yes, without the sugar the fermentation process doesn't work. If you add less sugar this will starve the scoby.

What if I add my scoby and starter culture before the tea has cooled properly?

You will have to wait and see! If the sweetened tea is below 30°C (86°F) fermentation will happen as per normal. If the tea is too hot it may kill the bacteria and yeast so no fermentation will happen.

What type of tea do I need to make kombucha?

Plain black tea will give the best results, start with English Breakfast, Ceylon or Darjeeling. If you want to try some other options Oolong tea will also work and give a more fruity flavour. Green tea can be used but will produce a weaker ferment. To help with this add 500 mL of starter culture and two scoby's.

We recommend completing at least 4 good batches to get a good strong culture before experimenting with teas.

How long do I ferment the kombucha for?

The first ferment time can vary from 8 to 25 days. We recommend tasting the kombucha from day 8 using a clean sterile spoon. This way you can become more aware of the flavour change during the ferment process and figure out which flavour profile you like best. The second ferment lasts 2 - 3 days to allow carbonation to develop and any added flavours to infuse.

What temperature should I store my kombucha at during fermentation?

Keeping your brew between 24 - 30°C (75 - 86°F) is important as it maintains the perfect balance of yeast to bacteria.

What if my fermenting temperature is too low?

If your brew drops below 20°C (68°F) for an extended time it is more likely to develop mould and the brew will take longer as the bacteria and yeast are sluggish in the cooler temperatures. It will still work, just give it more time to ferment and develop those tangy notes.

What if my fermenting temperature is too high?

Try and avoid your brew going above 30°C (86°F) as the yeasts overpopulate, the brew will speed up and the vinegar flavour will be stronger. If you live in a particularly warm place check your brew from day 5 – 6.

What if my scoby grows mould on the top of it?

You will need to throw out your whole batch and scoby. Once you can see the mould it is too late, and the batch is tainted. Mould can grow if the area that the kombucha is being brewed is easily contaminated or if your equipment and brewing vessel weren't completely sterile before you began.

My kombucha tastes vinegary, what have I done wrong?

Nothing! Kombucha tends to have vinegar notes from the fermentation process. If you don't want such strong vinegar notes try fermenting for a shorter time period or just water down your kombucha before drinking it.

Make sure you keep an eye on your fermenting temperature as if it is too high you will get stronger vinegar notes.

My kombucha isn't fizzy, why not?

Your kombucha won't be fizzy from the first ferment as the kombucha culture needs to breathe (have access to air) to ferment well. If you would like fizzy kombucha or flavour infusions complete a second ferment step in a sealed bottle.

What is the second ferment for?

The second ferment is done in a sealed bottle to allow carbonation to develop. During the first ferment the kombucha is able to breathe and all gas produced will escape, your kombucha will be flat. The second ferment traps the gas in the kombucha so there are bubbles when you drink it. It is also a chance to add flavours or infusions.

Do I have to second ferment?

No, the kombucha is still just as good for you after the first ferment. We recommend a shot of kombucha from day 25 of the first ferment in a glass of sparkling water if you still want the bubbles.

What can I add to my second ferment?

You can get as creative as you want! The best way to add flavour is to add some juice of your flavour preference into the sterilised bottle, then add your kombucha and seal. This will give both flavour and the sugar the kombucha needs to carbonate. Some suggestions for below

- Juice flavouring start with up to 20% juice and 80% kombucha
- Fruit (fresh, frozen or dried) start with up to 30% fruit and 70% kombucha
- Add 2 teaspoons of chia seeds for added benefits and texture.
- Add a slice of ginger root to get that fiery ginger flavour.
- Add flavour extracts e.g. vanilla, start with ¼ teaspoon of extract per 1 cup (250mL) of kombucha.

What bottles should I second ferment in?

It's important to second ferment in brewing bottles as the production of gas leads to higher pressure. We recommend reusable glass bottles with flip top caps. Be careful when opening bottles after a second ferment, as they are under pressure they may fizz.

Where should I store my ferment?

Store your kombucha out of direct sunlight, between 24 - 30°C (75 - 86°F). If you are fermenting other food or beverages make sure there is a gap of at least 1 metre between the kombucha and these. This will ensure no cross contamination of the different bacteria and yeast.

How do I know my kombucha is fermenting properly?

Look for the beginning of a new scoby forming on the top of the kombucha, this is the baby scoby and will look like a jellyfish. If you see the development of brown stringy things under the scoby this is the yeast developing. Additionally, once you hit 8 days and begin to taste your brew you will start to notice the vinegar notes which are from the fermentation process.

Is there something wrong if my scoby sinks?

No, it is completely normal for your scoby to sink, it will still work!

How much scoby do I need to use when re-culturing?

You will need 300 mL (10 US fl oz) of brew from your previous batch along with a scoby. You do not need a whole scoby, if you want to make multiple batches you can cut a scoby in half and just use that. The important piece is ensuring you have 300 mL (10 US fl oz) of starter culture.

Can I make sugar free kombucha?

Yes, during the fermentation process you must add sugar however this is consumed by the scoby. If you let the kombucha ferment for long enough all of the sugar will be consumed. You can then add any sweeteners such as stevia according to your taste preference.

How do I scale up my kombucha batch?

To scale up to bigger volumes we recommend following the Mad Millie How to Guide and making 1 L (1 US qt) first to get your scoby really active. Add this whole batch into your bigger vessel as the starter culture and add your cooled, sweetened tea.