



## SYMBIOTIC CULTURE OF BACTERIA AND YEAST (aka) "SCOBY"

Thanks for your Kombucha Culture "SCOBY" Purchase!

SCOBYS are as unique as snowflakes! Many of our SCOBYS are grown in upcycled glass containers, so size and shape may vary considerably. Your scoby might even be square! Regardless of what your SCOBY looks like, it is guaranteed to provide growth needed for and endless supply of Kombucha tea.

Each Kombucha Culture and starter is enough to brew 4 cups to 5 gallons of Kombucha tea based on size (see chart). If you hold up the sac to the light, you will notice some filaments of the mushroom floating in the nutrient rich tea. This is the seedling of the tea beginning to form. We use loose leaf tea and occasionally, some pieces of tea leaves will be in the bag as well. **THE TEA SHOULD BE CLOUDY WITH BACTERIA GROWING IN IT!**

Millions of Kombucha bacteria and yeast cells needed to brew your first batch of Kombucha will grow into a full size "mushroom" within 7-30 days. It is recommended that you start your batch as soon as you receive the starter for best results, but if you are not ready to begin, open the sac and tea, leave it in a glass container and store it in your refrigerator. Short-term refrigeration may slow down growth, but will not kill a healthy culture.

A Kombucha Culture is not a true mushroom although it is commonly called a mushroom. It is in fact a spongy cellulose material that is produced by the Kombucha bacteria and yeasts. It has no sex and produces no spores.

A SCOBY or Symbiotic Culture of Bacteria and Yeasts forms on the surface of the tea, acting as a barrier to keep out other organisms from getting to the sugary tea.

**Many people believe that the size or thickness of the SCOBY is an indication of potency, this is not true. Any culture grows thicker if left in the tea longer. Larger cultures are not better than smaller cultures besides looking larger.**

**DO NOT** let any metal other than stainless steel come in contact with the culture or tea while preparing since the metal molecules are absorbed into the culture. Brief contact, however, will not harm the culture or tea.

MAKE SURE TO:

1. Remove the tea bags prior to mixing the tea and culture.
2. Brew the tea between 68 degrees F and 84 degrees F. The culture may sink to the bottom—this is normal.
3. It is normal that your tea forms bubbly goo on day 3-7. **DO NOT make the mistake of thinking that it is mold** and throw the tea out—this too, is normal.
4. Taste the tea on day 6-7. It is supposed to taste sweet and sour even if the SCOBY has not fully formed. Your first batch may take up to 30 days as your SCOBY adjusts to its new environment
5. Work in a clean environment.

**FOR YOUR FIRST BATCH, YOU WILL NEED (See chart for exact amounts):**

1. Glass container with a wide mouth like a pickle jar or even a punch bowl or fish bowl.
2. Black or green tea, preferably organic.
3. Distilled vinegar to adjust the pH (we recommend Spectrum Naturals Organic Distilled White Vinegar)
4. Sugar
5. Coffee filter or paper towel and a rubber band to cover the tea.
6. Litmus strips (aka pH test strips), or pH meter.

You can experiment with different black and green teas and sugars after your first batch. Do not use any teas with added oils like Earl Gray. If herbal tea is used, blend it with black or green tea. Each tea and sugar will produce a different taste in the tea. I recommend organic cane sugar. **Sugar substitutes should not be used.** Most people drink 1-3 eight ounce glasses of Kombucha a day. Drinking more will not necessarily result in greater health benefits.

### THE RECIPE

1. Add boiling water and tea bags (or loose leaf tea). You should use filtered water. If you use tap water, boil the water for 5 minutes first to remove the chlorine.
2. Allow the tea to steep. I recommend at least 10 minutes to 1 hour. Longer steep times give more fuel for your culture to grow. Remove the tea.
3. Stir in sugar. The sugar is needed for the reproduction and fermentation. Allow to cool to room temperature.
4. Add vinegar (see chart). **You only need to do this to the 1<sup>st</sup> batch. This is to lower pH. Low pH prevents mold. Mold comes from airborne spores, not a SCOBY. High pH attracts mold!**

5. Pour the contents of the sac into the COOLED tea and stir briskly. **MAKE SURE THE TEA IS ROOM TEMPERATURE!** Tea hotter than 85 Degrees F will start to kill your SCOBY. Test pH to ensure it is below 4. If it's above 4, add more vinegar.
6. Cover with a coffee filter or paper towel secured with a rubber band. Insects are attracted to the sugary tea especially in tropical areas, so make sure it is well covered. **DO NOT USE CHEESECLOTH.** Fruit flies can crawl through this!
7. Let sit for 7-30 days in a constant 68-84 degrees F. Do not place in direct sunlight. At cooler temperatures, the tea ferments slower and the culture growth is inhibited. If your home is cooler, you can store the tea in the oven with the oven light on after replacing it with a 7-15 watt light bulb, or a Styrofoam box with a night light. **DO NOT** ferment the tea using a gas pilot light.

WHILE YOU WAIT... The first sign of growth will appear by day 3-7 in the form of fine filaments floating in your mixture. The original SCOBY will not have increased in size, but it will produce a larger culture on the surface of the tea that **MAY OR MAY NOT FLOAT** to the surface.

During the brewing period some UGLY, **DARKISH GROWTH** may first appear on the surface, then a thin skin will form. Many white gas bubbles will be seen; the skin will solidify and congeal into a new culture that will look like a thin pancake. Often people will mistake what begins to form on the surface as mold. **MOLD IS VERY RARE with the proper pH.** Your first culture will vary between 1/8" to 1/3" thick. There will be dark brown strands under the culture which is the simple root structure that will fuel your following batches.

Taste the tea on the 7th day using a straw to see if it is ready, if it tastes too sugary, then let it ferment longer. Usually it takes 7-14 days, but it could take longer depending on the temperature of your environment. If the tea has fermented, then everything is ok, even though the culture has not fully formed.

You are now ready to prepare your second batch.

#### YOUR SECOND BATCH

Make your next batch the same way you made your first batch, but this time, add the new culture you grew into the new batch.

Instead of using vinegar, you can use about 25% of your Kombucha tea from the first brew. The more Kombucha you use as starter, the faster your second batch will brew. Once the culture has been used to make a batch of tea, it is now called a mother.

The mother can either sink into or float on top of the tea. You will probably see dark matter and new strands attached to the underside of the culture you grew. This is the simple root structure of the culture.

Your second culture will grow faster and thicker than the first. The new culture may attach to the first culture. You can just pull them apart if you'd like.

If done correctly, your Kombucha will become so potent that it is not necessary to use a SCOBY to start the new batch; you can simply use the tea!

Fermenting tea will smell like overripe apples or vinegar. Many small bubbles might form on the surface. Remember that your tea is alive. Sometimes the tea will have formed a bubble and rise over the tea.

The top cultures will have dried and become discolored. Simply press the culture back down and submerge it into the tea.

PREPARED TEA should be kept cool in the refrigerator, preferably a glass container. The longer it is kept in the fridge, the smoother the taste will become. Home brewed Kombucha is only slightly carbonated since it is not brewed in a sealed container. If you want a heavily carbonated tea, cap the bottles and leave it at room temperature for 1-3 days. Be sure to open bottles twice daily to release pressure. **Keep bottles covered or in a plastic bin as they may explode from pressure. Always wear eye protection when handling fermenting bottles!**

#### STORING YOUR SURPLUS SCOBYS

You can store your extra SCOBYS in a glass container submerged in sweet tea, at room temperature or in the refrigerator (which slows down the rate of metabolism). They will keep as long as they have oxygen and sugar to live on, and are not allowed to dry out. When storing for a long time, the sweet tea should be refreshed.

CAUTIONS: Some individuals may be allergic to Kombucha tea. Drink only about 2 oz at first to test the tea to any allergic reaction. A few may suffer from stomach distress due to carbonation and fermentation in the tea. Pregnant and breastfeeding women should be aware that drinking very large amounts of the tea can affect the pH level of some bodily fluids and contain a small amount of caffeine and alcohol. Do not drink the tea if it is extremely sour. Do not use ceramic containers that may contain lead.

If the tea has not fermented in 14 days, please CONTACT ME through the Amazon Messaging System.

#### FREQUENTLY ASKED QUESTIONS

Q: What do I do with the original culture you sent me?

A: Once you have established a consistent brew, you keep 1 or 2 SCOBYS in the brew and give away any extras.

Q: How do I make my Kombucha more effervescent?

A: Nice work! Now that you have your 1st brew, you might want to make it fizzier. You can store your Kombucha in an air tight container, either a capped bottle or a sealed jar, fill the container to the top leaving only 2" of airspace, and allow the anaerobic fermentation to continue. This will allow the gas to be pushed into the Kombucha. If you want it to "go flat" just allow the gas to escape as you would with a soda. **Always cover bottles and use eye protection!**

Q: Can I use raw apple cider vinegar like Bragg's?

A: If you are looking to make pure Kombucha, I would stick to pasteurized vinegar. Using a raw ACV may not kill your SCOBY, but it may throw off the taste a bit.

Q: Now that I am a Kombucha master, how do I go about flavoring my Kombucha?

A: There are a plethora of recipes you can find online. However, one of my favorite ones is very simple one. I take a few slices of ginger and add it into my finished bottle of Kombucha. In a matter of a few hours to a day, the gingered Kombucha is delightful.

Happy brewing, *Scoby St. Cloud*

Product	Water (Filtered/Dechlorinated)	Tea (most tea bags are 2 grams each)	Sugar (Preferably Organic)	Vinegar (Distiled White, preferably organic). Required for first batch only.	Starter tea (Beginning with your second batch, use saved kombucha from your previous batch as starter. After adding starter, test your pH to ensure it is below 4 to prevent mold. Use additional starter if pH is above 4. Always test pH!
1 X Organic Kombucha SCOBY + included starter tea	8 cups	12 grams	3/4 cup	1/2 cup	2 cups
2 X Organic Kombucha SCOBY + included starter tea	15 cups	24 grams	1.5 cups	1 cup	4 cups
5 X Organic Kombucha SCOBY + included starter tea	15 cups	24 grams	1.5 cups	No vinegar required	4 cups
Kombucha Kitchen Large SCOBY + included starter tea	15 cups	24 grams	1.5 cups	1 cup	4 cups
Kombucha Kitchen Green Tea SCOBY + included starter tea	8 cups	12 grams	3/4 cup	1/2 cup	2 cups
Kombucha Kitchen Large Green Tea SCOBY + included starter tea	15 cups	24 grams	1.5 cups	1 cup	4 cups
Jun SCOBY + included starter tea	8 cups	12 grams	1 cup HONEY	1/2 cup	2 cups
Star SCOBY + included starter tea	15 cups	24 grams	1.5 cups	No vinegar required	4 cups
Heart SCOBY + included starter tea	15 cups	24 grams	1.5 cups	No vinegar required	4 cups
1 X Power SCOBY + included starter tea	4 cups	6 grams	6 Tablespoon	No vinegar required	1 cup
2 X Power SCOBY + included starter tea	8 cups	12 grams	3/4 cup	No vinegar required	2 cups
3 X Power SCOBY + included starter tea	12 cups	18 grams	1+1/8 cups	No vinegar required	3 cups
4 X Power SCOBY + included starter tea	15 cups	24 grams	1.5 cups	No vinegar required	4 cups
Kombucha Kitchen 2 Gallon SCOBYs + included starter tea	30 cups	48 grams	3 cups	No vinegar required	8 cups
Kombucha Kitchen 5 Gallon SCOBYs + included starter tea	75 cups	120 grams	7.5 cups	No vinegar required	20 cups