

MAKING KOMBUCHA



WHAT IS KOMBUCHA?

Although it has only gained popularity in the United States since the 1990's, kombucha is a fermented beverage that has been around at least two thousand years. According to Beatrice Trum Hunter, renowned natural foods author, in her book, *FACT BOOK ON FERMENTED FOODS AND BEVERAGES* (1973, Keats Publishing), KOMBUCHA (the "Manchurian Mushroom") is just one name for a common tea fungus beverage drunk in many areas of the world. In France, it is known as "champignon de longue vie: (mushroom of long life). Other names include: tea beer, tea cider, teeschwamm, wunderpilz, teekwass, fungus japonicus, Japanese tea fungus, Indonesian tea fungus, hongo, and cajnij. Kombucha is not really a mushroom. In fact, because it is part lichen, part bacterium xylinum, and part natural yeast culture, an acronym has been invented for the jelly-fish looking culture itself: S.C.O.B.Y. The word "soby" stands for "symbiotic culture of bacteria and yeast."

German author Gunther Frank's book, *KOMBUCHA: HEALTHY BEVERAGE AND NATURAL REMEDY FROM THE FAR EAST* brought this ancient beverage into a modern context. His research and testimonials piqued the curiosity of health-conscious Americans throughout the nation. People tried it and told their friends about its benefits, who in turn told others. Soon it could be seen everywhere, in health food stores and in people's kitchens fermenting.

Its taste is pleasantly tangy, rather like a strong cider, or reminiscent of the old farmhouse vinegar refresher, SWITCHEL. For years, before adopting kombucha, I had used apple cider vinegar and honey in a glass of warm water as an elixir. (This is wonderfully restorative, and I still use this if I'm not at home or run out of my kombucha supply, although as a vegan, I now replace the honey with agave nectar).

WHAT IS ALL THE FUSS ABOUT?

To begin with, kombucha is said to contain high amounts of good lactic acid, glucuronic acid, and a balance of all the B vitamins. According to Frank, glucuronic acid is manufactured naturally by the liver, having the purpose of binding up toxins and transporting them to the excretory system, where they are eliminated. He further states that drinking kombucha, with its high amount of naturally-occurring glucuronic acid, is especially beneficial to those suffering from gout, rheumatism, and arthritis and that kombucha is a powerful immune system builder as well.

According to the Moscow Central Bacteriological Institute, which studied kombucha in depth for decades, it also contains chondroitin sulfate, a component of cartilage. This is happy news for vegans and vegetarians who don't like to ingest supplements derived from animals, as commercial chondroitin is. Kombucha also contains hyaluronic acid, a component of connective tissue, which has gained popularity as a cosmetic ingredient, because of its natural collagen, which keeps the skin flexible and prevents wrinkles. In fact, the Russian government officials were astonished at the youthful appearance of those residents in villages where kombucha had been drunk daily for generations. It also contains gluconic acid, which combats viral infections and can dissolve gall stones, and mucoitin-sulfuric acid, a component of the stomach lining and the vitreous humor of the eye, are also found in kombucha.

In addition, there have been claims of kombucha's efficacy in helping the body fight cancer, multiple sclerosis and other immune system disorders. Some AIDS patients have even claimed that a daily regimen of kombucha has caused their T-cell counts to skyrocket (T-cells are part of the immune system's defense system). The list of its supposed miraculous cures is so long as to be almost unbelievable. I believe it has been helpful to me in my own regeneration, including relief from arthritis and hair regrowth. This made sense when I read that kombucha contained chondroitin, a substance I've only been educated on in the last few years. By now most folks have read about this substance, or perhaps even tried it for their painful joints or arthritis. Since each person's biochemistry is different, it may have varying individual results. I noticed my health improvements gradually.

Nutritionally speaking, kombucha contains vitamins B1(thiamine), B2(riboflavin), B3(niacin), B6(pyridoxine), and B12, a vitamin vegans are always looking for in non-animal form, folic acid, a good form of non-dairy lactic acid, and usnic acid(a substance with strong antibacterial and antiviral effects).

The bottom line here is that it's very inexpensive (in my book, a hallmark of a true "folk remedy"), easy to make, and best of all, it works! I have seen spectacular results first hand. Why not give it a try?

I have to tell you though; I'm not a Medical doctor and cannot give you medical advice. If you have a disease, please see a health professional.

HOW I BREW KOMBUCHA

Kombucha is often made with black tea. However, I like to make mine using loose gunpowder tea, a type of green tea with a long shelf life. I have been drinking green tea for years now with excellent results. The health benefits of drinking green tea have been widely studied and documented in the last few years. Medical claims have included its ability to prevent cancer of the esophagus, help in the fight against tooth and gum decay, and effectively lower blood cholesterol. It just made sense to extend my green tea drinking to include it in my daily kombucha. See section on green tea (“Beverages”).

Like my garden plants, I talk to my cultures. They are a living organism, and I want them to feel loved and appreciated for their daily help in my life.

MAKING KOMBUCHA TEA

As you can see from the list of ingredients and the directions, kombucha is easy to make. It is about as simple as making iced tea on the stove. Once you have made it a couple of times, you will not even need to refer to the recipe.

INGREDIENTS:

6 black tea bags OR 5 t. loose gunpowder tea*
1 c. sugar
1 large strainer, if using gunpowder tea
1 kombucha culture (a.k.a. “Scoby”)
1 gallon water
1 large stainless steel or ceramic pan
1 gallon glass jar
1 6" square of cheesecloth, muslin, or porous cotton
1 rubber band
Masking tape and a marker for labels

*Both used black tea bags and used gunpowder loose tea make excellent compost in your garden, especially if fed to roses and azaleas, both of which are acid-loving.



1. Bring one gallon of water with 1 cup of sugar to a boil, then steep 4 tsp. gunpowder tea in strainer for at least 10 minutes



2. Let tea cool, then pour into labeled jar



3. Place culture into tea



4. Store with cloth cover, held on with rubber band for 7-10 days at room temperature

BREWING & FERMENTING DIRECTIONS:

1. In a large pan, bring water and 1 c. sugar to full rolling boil.
2. Remove from heat, add tea bags, and cover. Alternately, put 5 t. of loose gunpowder tea into a large strainer whose handle can rest on the sides of the pan.
3. Let steep 10-15 minutes.
4. Remove lid and tea bags or the strainer with the gunpowder tea in it and allow the tea to cool thoroughly to room temperature. (This cooling step is important so that you don't hurt the kombucha culture, a living organism that doesn't like scalding water!)
5. Add the culture by slipping it gently into the tea. Cover with the cloth and secure with the rubber band to the neck of the jar.
6. Affix a piece of masking tape to the jar, and write today's date on it with the marker.
7. Allow kombucha jar to sit, undisturbed, out of direct sunlight, for 7-10 days. Seven day Kombucha is still a little sweet, but 10 day Kombucha is not. The label is to help you remember the date you started it, so you'll know when to harvest your culture.

HARVESTING KOMBUCHA:

1. On harvest day, remove the cloth and scoby culture, which by now has reproduced, forming a "baby" kombucha under it, resembling a double pancake. You may either leave the two cultures together, or else carefully peel the baby from the mother if they are attached. Now you have 2 kombucha cultures with which to work. Store these in another wide-mouth glass jar with enough kombucha liquid to cover the cultures, and then cover the top of the jar with another piece of porous cloth. **DO NOT** refrigerate the kombucha cultures (scobies). This way they will remain alive until you can use them or give them away.
2. Pour the harvested kombucha tea into a covered bottle or pitcher, label it, and store it in the fridge. Although it is recommended that you store your cultures in a glass container, and ferment the tea in a glass container, once you harvest the tea, it is okay to store it in an empty plastic juice bottle. You will need 2 64-oz. empty plastic juice bottles with lids in which to store your harvested kombucha in the fridge. I use bright tape and a marker to re-label the bottles "KOMBUCHA" so as to avoid surprises. (If somebody pours out a glass of what he thinks is "100% Raspberry/Cranberry Juice", e.g., and it turns out to be kombucha, he may not enjoy that sudden unexpected first introduction to the world of kombucha drinking!)

MOST IMPORTANT! I consume a large (12 to 16-oz.) glass of kombucha every morning on an empty tummy, and have found it to be a most wonderful way to greet the morning with a smile. With the thought of my kombucha waiting for me in the fridge, I leap out of bed to pour myself a glassful. Reading something inspiring to get my day going, coupled with sipping my morning elixir, I am totally happy to greet the new day.

I start a new batch every 5 to 6 days, so that I never run out. As well as being my basic "wake up" drink each morning, I often enjoy this refreshing, mildly carbonated beverage in the late afternoon as a "pick-me-up" drink, as well.

GETTING "CULTURED"

If you are fortunate enough to know a friend who makes kombucha, simply obtain a culture ("S.C.O.B.Y".) from him or her. Most kombucha enthusiasts are only too happy to share their extra cultures. If not, try a local health food store or co-op. If they do not have cultures for sale directly, chances are they can direct you to someone willing to sell or even give you one to get you started. If all else fails, simply write to me and I will be happy to send you a culture, charging you only for the shipping cost, provided I don't get overwhelmed with requests. We have found that kombucha cultures survive the mail beautifully if they are packed in a little kombucha liquid and then in double zip-lock plastic bags. I have given away hundreds of cultures with instructions, and even made the first batch to help people get started, because I believe in its power so strongly.

SOME SPECIAL NOTES:

Kombucha is a hardy culture, able to withstand some severe weather in cold climates. I thought my kombucha cultures were dead on several occasions when the temperature dropped. Usually they were just stressed out, and needed some babying. Now if I'm in an unheated place, I wrap a blanket and a triple-thick trash bag (a shower curtain also works) around the outside of the gallon jars to give them a cold-weather jacket. DO NOT cover the top of the jars, except with cheesecloth or other breathable material, because this would suffocate them.

Remember, too, that any fermentation process takes longer in cold weather. We have waited as long as 12-14 days to harvest our kombucha during severe weather. You may be surprised at the appearance of the cultures when you remove them from the liquid during cold weather. They might be brown and ragged around the edges. Keep them as warm as possible, and as soon as the weather warms up a few degrees, they will return to good health.

Don't be alarmed by the use of white sugar in making kombucha. It is the culture that feeds upon the sugar, not you. By the eighth day of brewing the sugar has been transformed into kombucha, and no longer exists as sugar. It is no longer sweet. Kombucha seems to do best when fed ordinary white sugar. It does not do well with brown sugar, honey, maple syrup, etc.

If you prefer a tea with even less sweetness, wait a few extra days to harvest it. Just be aware that around the 11th or 12th day it will begin to change from an apple cider taste to a vinegar taste. In the hot summer months, you may even wish to harvest your kombucha a day earlier to prevent it from becoming too acidic.

During the Cold War of the 1980's, when the Russian government was doing extensive scientific research on kombucha, they found that kombucha harvested BETWEEN 7 TO 10 DAYS contained the most nutrients and medicinal properties.



1. Remove cloth cover from jar



2. Remove cultures



3. Temporarily store cultures in clean bowl



4. Pour Kombucha into bottles

HERE'S TO YOUR HEALTH—BOTTOM'S UP!

This article was excerpted from Linda Joy Lewis's Vegan Cookbook

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