



KOMBUCHA Instructions

Kombucha : Is what's known as 'CULTURED FERMENTATION' where you begin with an existing culture (vs. Wild which relies on wild yeasts in the air).

To make kombucha, you need only a SCOBY (the jellyfish-like disk you have purchased from us or elsewhere), sugar, filtered water, and some tea.

SCOBY= Symbiotic colony of bacteria and yeast that looks like a jelly fish.

Once you learn the basics of fermentation, you'll be well on your way to creating a happy home for your gut microbes, the foundation of good health.

The SCOBY you have has a pinkish colour because I regularly make only fruit or flower kombuchas such as rose, hibiscus, and pomegranate which tint the SCOBY pink. Once you begin making your own kombucha, the SCOBY will take on the colour and flavour of your blend, so if you make only green tea kombucha, the SCOBY will eventually lose its pink colour.

Over time, if treated well, your SCOBY will multiply many times over.

RECIPES:

BASIC KOMBUCHA: to make 1 litre

- 4 tea bags (green, black, or fruit)
- 1/4 cup raw or white sugar
- 3 T kombucha starter
- 1 kombucha mother
- 1 litre of springwater

PRIMARY FERMENTATION:

Bring 500 ml of water to a boil. In a separate, heatproof bowl, add tea bags and sugar. Pour water over top, give it a good stir to dissolve the sugar, and steep for 3-5 minutes. If using green tea, take the bags out now. Otherwise, if making a floral tea, you can leave it for a few

hours (examples include using dried hibiscus flowers, Pohutukawa stamen, or tea bags that only include dried fruits and flowers). Strain the tea into a large, heatproof glass jar. When the mix has cooled to room temperature, pour in remaining water and starter liquid. Add the SCOBY to the jar. Cover with a piece of muslin and secure with elastic band. Leave in a cool spot where it won't be disturbed for 4 days in hot weather and 7-14 days in cooler weather.

Bottling and SECOND FERMENTATION:

Gently remove the mother to re-use, retaining 3 T of the liquid for your next brew. Put a funnel over a sterilized glass bottle with lid and strain the kombucha into bottle. Tightly seal the bottle and leave on the bench to build carbonation, burping occasionally to release the pressure. When the kombucha is as fizzy as you like, store in the fridge to slow the fermentation process.

If you are infusing fruits or any other suitable flavouring, you can add these in the SECOND STAGE to the bottle. For more information on secondary fermentation, see references below. I personally don't bother with secondary fermentation because I start my first brews with flowers.

Recipes:

WENDY's ROSE & GINGER KOMBUCHA

1. Pour 750 ml boiling water onto 4 tea bags (I use Nerada brand rose and ginger) mixed with 1/4c raw sugar
2. Let steep for a few hours, till cool.
3. When the mixture is cool, pour into a 1 litre jar. Add 200 more cool water. Place scoby on top of the liquid with 3 T of leftover liquid from last ferment.
4. Cover the kombucha mix with muslin cloth. Secure with an elastic band.
5. After 5 days, taste to check that some fermentation/bubbles have developed.
6. The kombucha will be ready in 7-14 days. When the weather is hotter, fermentation will occur faster.
7. Once it's ready, remove the scoby to use for a new batch. Close the lid and leave the kombucha for another 24 hours for extra fermentation. Then place kombucha in the fridge.

Why is eating and drinking fermented foods and drinks good for us?

They contain PROBIOTICS: the good bacteria that are one of the keys to overall wellness. They add 'good' bacteria to your gut to outweigh the 'bad' bacteria. Most of us have heard of the fabulous and powerful benefits of probiotics:

- Eliminate waste and toxins from the colon
- Manage gastrointestinal issues and aid digestion*
- Enhance skin health
- Improve nutrient absorption*
- Regulate the immune system thereby reducing inflammation
- Improve mood and reduce stress (your gut is responsible for around 80-90 pc of the production of serotonin, the amazing feel-good hormone)

*Fermentation breaks down difficult-to-digest food compounds such as oligosaccharides & lactose. This is the reason why some lactose-intolerant individuals can tolerate fermented dairy products containing lactose. It's also the same reason why people struggling with IBS can sometimes tolerate cultured grains in sourdough. Other nutrients like proteins & fats are also made more digestible by fermentation. Many seeds, legumes, & grains contain phytic acid which binds important minerals like iron. This binding makes most of the iron content in a food unavailable for absorption. But when the food is cultured, fermentation breaks down the phytic acid therefore making it easier for your body to absorb sufficient iron from your meal. (source: SYMBIOTA)

Why Probiotics Capsules Can Never Be As Good As Taking Fermented Foods and Drinks?

Although probiotic supplements help, they generally only have selected strains of bacteria. With probiotic foods, you'll get natural and denser probiotic nutrients.

How the gut becomes unbalanced:

- * chemicals in food, water and air
- * Poor diet, especially too much sugar, gluten, processed foods
- * stress
- * medications, antibiotics

Pathogens such as bad bacteria and viruses can be overcome with a strong gut, which in turn should lead to fewer illnesses.

Once you start experimenting, you'll discover how easy it is to keep going! If you've been buying fermented products, chances are you're spending a lot of money and some of the so-called kombuchas on the market are actually diluted and far-too-sugary to provide the health benefits of natural, unpasteurized kombucha. It's also a delight to hear the bubbling and hissing of your elixirs fizzing away as the culture feeds off the sugars, and to taste the fizz on the tongue, the slightly acidic zing that results from the fermentation process. If you're trying to cut down on your alcohol consumption, brewing and making your own kombucha provides with you no- to low-alcohol beverages at little cost.

Be aware that, as with any unpasteurized product, caution is to be exercised when pregnant although not all doctors agree. Also it's important to keep in mind that too much kombucha could lead to tummy upset (because of its acidic nature) so pay attention to your body's signals if you find yourself drinking kombucha regularly. Sandor Katz addresses the 'potential danger' of kombucha on pages 168-9 of *The Art..* and concludes: 'I reject the idea that kombucha at home is random or dangerous. All of the ferments...involve creating selective environments to ensure success...Make sure you understand the parameters of the selective environment you need to create...Basic information and awareness are important. Empowered with them, you may ferment without fear.'

SELECTED ENVIRONMENT: Katz is referring to the best practice and environment used to create healthy ferments. Factors such as sanitation, temperature, oxygen, salt, water type (chemical-free and chlorine-free is best), type of jar (glass is best for kombucha) and lid, sunlight (avoid). Hotter temperatures will hasten fermentation while in cooler months, your fermentation will take longer. Other factors to consider are the source of your ingredients. I use organic fruits, flowers and teas as much as possible in my kombucha. For kimchi, chemical-free veg is best.

Cleanliness: as Katz and other experts agree, you don't need a hospital-grade sanitised environment to make these ferments (if anything, too much sanitation and chemical residue can kill the good bacteria.) Wash your equipment in hot water with dishwashing liquid, then rinse with hot water and allow to air dry or you may prefer to dry your jars in a low oven. Ensure your hands and utensils are very clean (I pour boiling water over mine and then let them airdry before use).

References:

Sandor Katz, *The Art of Fermentation* and *Wild Fermentation*

Felicity Evans, *Kombucha & co*

Michael Murray and Joseph Pizzorno, *The Encyclopedia of Healing Foods*

Different uses of kombucha:

You can make fabulous hair rinse from kombucha that will leave your hair soft and silky! Allow fermentation to continue till the vinegar stage so that no sugar is left—the kombucha will smell a bit acidic. Bottle it and use it as a hair rinse.

You can also make 'fruit' leather out of leftover scobys.