Water Kefir - Basic Instructions

What is it?

Water kefir—like milk kefir and kombucha—is a beverage made by a specialised colony of lactobacillic (LB) bacteria and yeasts. Each of these three beverages is made by a different sort of colony which prefer different food. *Milk kefir* will only work in a lactose environment, since that's the sugar it likes to eat. *Kombucha* requires the tannins of tea (or similar tannin sources). In the case of *water kefir*, it prefers basic sugars like those found in plants or honey.

IMAGE CREDIT: BELLABAITA ON FLICKR; CC BY-NC

Water kefir is very easy to make and can be very tasty. All water kefirs are naturally probiotic thanks to those little LB bacteria. They can be flat or slightly fizzy. Because of the yeasts in the colony, water kefirs do contain trace amounts of alcohol but unless you allow your colony to get way out of balance the amount will never be more than trace and therefore not noticable.

How do I do it?

It's super easy! All it takes is a few materials, some simple ingredients, and a few days of waiting.

Materials

- A **glass jar** of adequate size (a quart/litre Mason jar is perfect)
- A **top** of some variety for the jar (a paper towel held in place w/the Mason jar ring works well)
- A **sieve** or strainer of some sort
- A **container** of adequate size for the finished water kefir (another Mason jar, for instance)
- [optional] A **plastic bottle** of adequate size (if doing a secondary fermentation or going for the fizz)

Ingredients

- **Water kefir grains**
- About a litre of non-chlorinated (read: not tap) **water**. Bottled spring water is A-OK. Distilled water is less good, since it doesn't contain trace minerals.
- About ¼ cup of plant-based **sugar or honey.** Do not use stevia or any other sugar substitute, even if it's from a natural source.
- [optional] A few pieces of sulfite-free **dried fruit**
- [optional] Fruit or some other sort of **juice** (if doing a secondary fermentation)

Basic Method

1. Put the sugar/honey and about a cup of the water into the jar. **Stir or shake the sugar** until it's completely dissolved.
2. If you feel like it, **add in about 3 pieces of dried fruit**. This provides some colour to the beverage, a little bit of flavour, and a bunch of extra minerals for the kefir grains to munch on. This is optional unless you're using a highly refined sugar source (plain white sugar, for instance).
3. **Add the water kefir grains** to the sugar solution.

4. **Add water** until the level comes up to about the bottom of the threads on the jar. You may want to stir it gently to make sure the heavier sugar solution actually mixes with the newly added water.
5. **Cover** the jar. You'll want this to be permeable in some way (loose cap, or a cloth/paper towel/coffee filter held with the jar ring), since the grains will generate CO_2 as they're consuming the sugar. If you cover the jar tightly, it could explode. You really don't want that to happen.
6. **Set the jar somewhere** that's room-temperature and not directly in the sun. The grains are pretty tolerant of a lot of different climates, so don't fret too much about this.
7. **Wait for 2-3 days** or so. The amount of time will depend on the temperature, the amount of sugar in the solution, how your grains are feeling that day, etc. The grains will rise and fall like little submarines as they release CO_2. The dried fruit (if using) will usually float to the top in a day or two.
8. Discard fruit (if using) and **strain into another container** when it's done. How can you tell it's done? Smell/taste it. It should be much less sweet since the sugars are now mostly converted to lactic acid. That lactic acid will give it a slight zing. It might be slightly fizzy because of the CO_2. If it's still quite sweet then let it sit another day or two. Or don't. It won't harm anything if you drink it while sweet. If it starts to smell or taste at all like vinegar, strain it immediately. You've let it ferment too long so now the acetic bacteria are taking over from the lactobacillic.
9. Enjoy your water kefir while you **start a new batch**. If you're not drinking it immediately, be careful about potential secondary fermentation explosions (see below).

Secondary Fermentation

While you can use your water kefir grains directly in fruit juices, it can get a bit messy to strain them out since you may end up with fruit pulp mixed in. It's usually better to mix your strained water kefir with any fruit juice you want then set it aside for another fermentation cycle. The bacteria and yeasts in the kefir will get to work on the sugars in the juice, drying it out and zinging it up. If you do this in a sealed bottle, the beverage will naturally carbonate *but be careful*. Too much carbonation and you'll have a little time bomb on your hands. Keep an eye on it and definitely use a plastic bottle rather than glass. Not only can the plastic take the pressure a bit better, but if it does explode the shrapnel will be less dangerous.

Storing the Beverage and Grains

General rule: Cold temperatures slow down all fermentation.

If you don't fill the container up all the way, you can usually store it sealed in the coldest part of the fridge with minimal risk of explosion. Leaving plenty of space in the container provides room for the CO_2 to build up slowly and safely. It also means that you may end up with lightly carbonated water kefir when you do drink it.

If for some reason you need to pause your water kefir making cycle (need to go out of town, for instance), start a new batch and then put it in the coldest part of your fridge. The grains will go all but dormant. This should keep them healthy and happy for a couple of weeks. Should you need to pause the cycle for longer than that, check the website in the footer.

When in doubt…

…always check the Yemoos website.