

Water Kefir Basics: How to Make Your Own

Water kefir has the delicious appeal of a fruity, sweet-tart soda. A probiotic powerhouse, kefir offers a richer, more diverse population of beneficial microbes than either yogurt or kombucha. Its short fermentation cycle makes it one of the easiest and quickest fermented foods to make.

Yield: Two quarts/liters. The recipe can easily be halved or doubled. The Folding Proofer will hold up to eight one-quart / one-liter size jars.

Timing: 30 minutes preparation and 2 days for the first fermentation as well as optional 1-3 days for the second fermentation.

Ingredients	By volume	By weight
Water	1 C / 250 ml	250 g / 9 oz
Sugar*	½ C	100 g / 3.5 oz
Water kefir grains, fresh and hydrated**	4 T	11 g / 0.4 oz
Additional water, non-chlorinated	6½ C / 1.6 L	1.6 kg / 56 oz

^{*}Preferably a less-refined type such as organic blonde sugar. Do not use honey.

Equipment: Brød and Taylor Folding Proofer & Slow Cooker, stainless steel or plastic funnel (no aluminum), fine stainless steel or plastic strainer, and heatproof mason jar(s) no more than 8" / 20 cm tall. A thermometer can be helpful for making sure the water mixture has cooled adequately.

Getting Ready. Set up the Proofer with the rack in place and the temperature at 75 °F / 24 °C. If using glass mason jars and a thermometer, they should be thoroughly clean and dry. Have coffee filters or clean cloths and rubber bands available to cover the jars.

Making the Water Mixture. Combine all of the sugar with 1 C / 250 ml of water and heat, stirring, until the sugar dissolves, at about 150 °F / 65 °C. Remove from heat and cool for 10 minutes.

Transfer the warm sugar water to mason jars, dividing evenly between jars if using more than one. Add additional non-chlorinated water to the jars to fill, leaving a small space at the top to prevent spills.

Checking the Temperature. Before adding the culture, make sure the sugar-water mixture is below 85 °F / 29 °C. If necessary, allow the mixture to cool.

Adding the Water Kefir Grains and Covering them. Add the fresh and hydrated grains to the sugar water, using about 2 T / 5.5 g of grains for each quart / liter. Cover the jars with a breathable cover such as a coffee filter or clean cloth and secure the cover with a rubber band. The culture does not require oxygen, but a breathable cover prevents leaks and explosions in the Proofer and also helps minimize trace alcohol levels produced by the culture.

 $^{^{**}}$ If the water kefir grains are dried, they need to be hydrated and activated before the first use.

Fermenting for 48 Hours. Place jar(s) in the Proofer to ferment. For the most accurate temperature control, arrange the jars so that they are not directly over the center of the Proofer. Allow the culture to ferment for 2 days / 48 hours at 75 °F / 24 °C. For a riper flavor or stronger carbonation, the temperature can be increased to 78 °F / 26 °C or up to 82 °F / 28 °C.

When the water kefir is done, the surface will have a few visible bubbles, it will smell a bit yeasty, like bread dough, and should taste mild and slightly sweet. Even though the acidity will have increased with the pH at about 4.3-4.5 at this point, the water kefir will not yet taste very tart.

Non-Carbonated Water Kefir for Smoothies. The easiest way to finish your water kefir is to store it plain and use it for smoothies. No flavoring is needed, as water kefir has a slightly sweet, neutral taste that will blend easily with many different smoothie recipes. Plain water kefir can also be blended with fresh or frozen fruit and frozen in popsicle molds.

When the 2-day fermentation is complete, fit a clean storage jar with a non-aluminum funnel and a fine strainer, and then pour the fermented water kefir through, allowing the grains to collect in the strainer. Seal jars with loosely screwed on lids and refrigerate. Use the grains to start your next batch, or store them according to the directions here: culturesforhealth.com/take-break-water-kefir

Creating Naturally Carbonated Water Kefir. Water kefir turns into a delightful sweet-tart probiotic soda through a second fermentation in the bottle. We recommend using swing-top bottles because they are strong enough to prevent explosions and seal tightly enough to capture the natural carbonation.

If you are just getting started with water kefir, consider flavoring your bottles with one of the following beginner-friendly options:

- **Sweet Fruit Juice.** Fill each bottle until about one quarter with juice. Grape, apple, or orange juice are all great options. The juice will be less sweet and a little tarter after fermenting in the bottle.
- Citrus Water Kefir. Add about 1 T / 15 ml of lemon or lime juice per 8 oz / 250 ml, or fill bottles until about one quarter with grapefruit juice. If desired, add about ½ tsp / 2 g of sugar per 8 oz / 250 ml to offset the tart juice and encourage carbonation.
- **Ginger.** Add plenty of thin-sliced or minced fresh ginger to each bottle. Use about 1" / 2.5 cm ginger root per 8 oz / 250 ml and consider storing 1-2 days in the refrigerator after the bottle fermentation is complete, as the ginger will be somewhat slow to add flavor.

After adding flavoring to your bottles, fit one with a non-aluminum funnel and strainer. Before pouring in the fermented water kefir, give it a good stir with a spoon to evenly distribute the probiotics. Then pour it into the bottles, allowing the grains to collect in the strainer. Leave a little airspace at the top of the bottle. Use the grains to start your next batch, or store them according to the directions at this website: culturesforhealth.com/take-break-water-kefir.

Second Fermentation in the Bottle. Seal the bottles and allow them to ferment for 2-3 days at a cool room temperature, below 70 °F / 21 °C. Check the carbonation of one of the bottles after 2 days by tasting a little. If it is noticeably fizzy, chill the bottles. If it is not yet fizzy enough, allow the bottles to ferment 12-24 hours more. When cool environment is not available, bottle ferment for a shorter time of 1-2 days and consider burping the bottles to prevent explosions. After bottle fermentation is complete, chill and serve cold.