The Ultimate Guide to

WATER KEFIR

by ediblealchemy.co
Water Kefir Quickstart Guide

Water kefir fermentation is a great way to make delicious soda-pops that are also rich in gut-healthy probiotics. Here’s what you need to get started.

General Supplies & Equipment

- A 1L (4 cups) jar with a wide-mouth opening and lid
- Sugar (unrefined is healthier)
- Dried Fruits (Dates, Figs, Apricots, Rasins, Goji Berries)
- Paper towel or clean cloth + Rubberband
- Kefir Grains (active or dehydrated)
- Stainless Steel, Plastic or Bamboo strainer
- 1L Plastic Bottle or Glass Jar

Kefir Grain Rehydration

If you have acquired dehydrated kefir grains, this is your first step! Otherwise, skip to “Basic Kefir Recipe”.

Instructions:

1. **Make Sugar Water.** Add ½ cup (100g) of sugar to 4 cups (1L) of warm, previously boiled (and therefore dechlorinated) water in a clean, wide-mouth glass jar. Stir till sugar is completely dissolved.

2. **Allow the sugar-water to cool.** Wait till your sugar water has reached room temperature, as hot water will kill your kefir.

3. **Add kefir grains.** Once the sugar water is completely cooled add 1 tablespoon of dehydrated kefir grains.

4. **Do NOT seal the container!** Your kefir needs to breathe during rehydration. Cover your jar with a paper towel, or a coffee filter, or a dishcloth, and secure in place with a rubber band.

5. **Wait 3 days.** This could actually be anywhere between 2 & 5 days depending on conditions. But after 3 days most rehydrations are complete.

6. **Strain out kefir grains.** Strain the re-hydrated kefir crystals out of the water and throw away the rehydration liquid - it will not have been significantly cultured by the rehydrating grains. Use your activated kefir grains in your first recipe!
Basic Kefir Recipe

Now that you have your live, hydrated water kefir crystals, it’s time to make your first basic water kefir.

Instructions:

1. **Make your sugar solution.** Add ½ cup (100g) of sugar to 4 cups (1L) of boiled, still warm water in a jar or plastic bottle. Stir till sugar is completely dissolved. Allow the sugar-water to cool to room temperature.

2. **Add active kefir grains.** Once the sugar water is completely cooled (again, hot water can kill your kefir!) add 1 tablespoon of active kefir grains.

3. **Add dried and fresh fruits.** The extra yeasts from the skin of the fruits help the fermentation process as your kefir grains eat the sugars and create more carbonation while adding fruity natural flavours.

4. **Seal your container.** Water kefir grains do not need oxygen to survive (like a kombucha SCOBY does), so your vessel can be sealed or lightly capped. The tighter the cap, the more carbonation builds up.

**NOTE:** over-carbonation can be dangerous, especially in glass containers! Open the cap every 1-2 days to release air-pressure and to avoid explosions.

5. **Watch your ferment.** After 48 hours, the fruit that sank to the bottom of your jar should now be floating at top. This means carbonation and fermentation are happening!

**NOTE:** your kefir will ferment slower or faster, depending on the ambient temperature. To bring fermentation to a near stand still, place your kefir in the fridge.

6. **Strain out the kefir grains.** Pour the flavorful, effervescent liquid into a bottle while straining out the kefir grains. Place your grains in a fresh sugar-water solution. These happy fellas have probably doubled in quantity, and are ready for your next ferment.

7. **Enjoy or ferment further.** The liquid product now separated from the grains is “Water Kefir” and will continue to ferment and carbonate in the sealed bottle (secondary fermentation). This beverage can be cooled and enjoyed as is. Optionally, you can enhance it further with herbs such as mint and cardamom, sweeteners such as sugar or honey, and various flavored syrups.
Recipes
I prefer to make a large jar of water kefir with my basic water, cane sugar, kefir grains and whatever fruit I have on hand. Once that water is cultured and bubbling, I remove the grains and use the liquid to inoculate my other soda-pops. You can add the grains directly, as I have in some recipes below. However, if loose tea or many fresh fruits are included, it might be difficult to separate your grains later.

Yerba Mate Honey Water Kefir
Make a hot yerba-mate tea according to your likened strength of the flavor. For every 1 L of tea, add ¼ cup of honey. Once tea is cooled and honey dissolved, add either direct water kefir grains, or dilute the sweet tea with the prepared water-kefir solution.

Jam-Jelly Juicy Water Kefir
Do you have a special jam or jelly that you just love the flavor of? Use it to flavor your water kefir. Dilute and dissolve the jam/jelly in boiling water, whether it’s strawberry, loganberry, gooseberry, or raspberry! Once the water is at a sweetness level that you like, cool it and add active kefir grains (1-2tbs per liter) OR live kefir water (¼ cup aka 60ml per liter).

Rosehip-Hibiscus-Apple
This is one of Edible Alchemy’s classics – always a crowd pleaser. You can find dried rosehips, hibiscus flowers and dried apple in tea stores. The combo is delicious as a tea, but even better as a soda. Prepare it as a sweet tea, then add your water kefir. 1-2tbs per liter OR ¼ cup aka 60ml per liter of live kefir water.

Coconut Water-Water Kefir
Coconut water is carbohydrate rich and excellent kefir food. Simply add your kefir grains directly to the coconut-water and ferment. Remove the grains once when the brew is flavor of your liking, cool the liquid and drink.

Lavender-Rose Water Kefir
Steep 1Tbs of lavender and 5 dried rose-petals per liter of water. Dissolve ⅛ cup (30g) sugar (cane or honey). Once cooled, add ¼ cup (60ml) water kefir liquid. Pour into a bottle, cap it, and let bubbles build. Mild, fragrant, and floral.

Sparkling Apple Mint
Mix equal parts prepared water kefir and apple juice. Add mint leaves and seal till bubbles accumulate.

Marmalade Water Kefir
Either adding in your favorite marmalade or adding thin peel strips of orange zest to your standard water kefir.

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Orange Cream Soda Kefir
Add 2 teaspoons of Vanilla extract and the orange peel (without pith) of 1 orange to a liter of standard water kefir.

Strawberry Mint Kefir
Add 1 cup of strawberries and 2 sprigs of mint to 1 liter of your standard, grain-free water kefir.

Root Beer Kefir
Add 2 tsp. of root beer extract (or to taste) to your standard water kefir, along with simple syrup to taste (until it’s sweet enough).

Lemon Peach Kefir
Add 2 sliced, fresh peaches (or 1 can of canned peaches), along with ½ a lemon, sliced, to your standard water kefir.

Orange Cardamom Kefir
This is a delicious, nearly christmas-y flavored kefir. Add 2 tsp. of cardamom seeds, as well as the orange peel from 1 orange to your standard kefir. Add simple syrup (ideally with demerara sugar) to taste.

Herbal Syrups
Herbal syrups are a great way to flavor your secondary (w/out grains) fermentations. They’re easy to make, and a great way of preserving the flavor of fresh herbs for a longer period of time.

1. Combine 1 cup of sugar and 1 cup of water (equal parts by volume) in a saucepan.
2. Add a your herbal flavoring ingredient.
3. Simmer on the lowest temperature while stirring frequently for 20 minutes
4. Allow to cool to room temperature
5. Strain out your herbal flavorings, and any remaining organic residue. This will increase the longevity of your syrup. Refrigerate the syrup indefinitely in a glass container

Some herbs and flavors which make for delicious water kefir syrups:
- 2 sprigs of rosemary
- Peel of 1 orange (just the peel, no pith)
- 2 tbs cardamom seeds
- 1 tbs lavender buds
- 1 bag black tea
- 2 stalks lemon grass
- ½ cup of sliced ginger
- 2 sprigs fresh thyme

After you’ve made your syrup (and cooled it to room temperature!) add it to a bottle of strained, grain-free water kefir until it is sweet enough for you. Seal it, and let it start carbonating!
Maintenance 101

Your water kefir does require some basic maintenance.

1. **Feed regularly.** Water kefir grains want to be fed every 2-3 days.
2. **Keep at room temperature.** Your kefir ferments best at a room temperature environment (again, if they are kept in cooler places, they are less active and need to be fed less often).
3. **Refresh sugar-water.** As your grains ferment, over time they create a sour, acidic environment. For our digestion and palate this is great, but an environment that is too acidic can be harmful to your grains. If you don’t regularly change their sugar water (strain and reintroduce into a fresh sugar water solution), the organisms in your kefir grains will “pickle” themselves, eventually dying and then decomposing into nothing in their liquid habitats.
4. **Mid-term storage.** Going away for up to 2 weeks? Put your grains in a fresh sugar-water solution and place in the fridge to slow fermentation.
5. **Long-term storage.** Going away for a longer than 2 weeks? Strain your grains into a plastic bag or freezer safe (non-metallic!) container, and place in your freezer. They can survive for months in this “hibernation” state. When you are ready to use them again, put the ice-chunk of kefir grains back into a sugar-water solution, where it will thaw and start eating again. Add some “welcome-home” fruits, a cleaned eggshell for extra calcium, or a pinch of baking-soda for minerals.
6. **Too many grains?** They multiply fast, and this can easily become an issue for you. Try dehydrating your grains using a dehydrator, or simply spreading them out on a plate with good air circulation. As long as the grains are not heated to a temperature over 130 degrees, they will not die and can be re-hydrated when the time comes. This is also a great method for people moving overseas or as a backup!
7. **Vessels and Equipment.** I prefer using glass as it’s transparent, I can see what is happening inside and there is no chance or plastic leaking anything into my kefir to hurt me or my kefir grains. Stainless steel can work, but again, you can’t see what’s happening inside, and I like to avoid using metal whenever possible as metal is an irritant to the grains. One exception is the strainer. If you have a plastic sieve, great, but brief contact with a metal strainer is not a problem.