

WATER KEFIR RECIPES & VARIATIONS

By Clare Speichinger

Over the past ten years, water kefir ("keh-feer") has gained momentum and shelf space at grocery and health stores next to its tart cousin, Kombucha. It is a mildly zesty fermented sugar-water beverage, that has no caffeine and is low glycemic. At its most basic, it is made by adding the water kefir *grains* to sugary water. The grains are a complex of bacteria and yeast that metabolize the sugar and produce water kefir. The probiotic effects are present after *primary fermentation* and the water kefir can be consumed at this point, but there is a great opportunity to add flavor and carbonation by performing a *secondary fermentation* and/or *bottle conditioning step*.

PRIMARY FERMENTATION vs. SECONDARY FERMENTATION vs. BOTTLE CONDITIONING

Primary fermentation of water kefir is the initial fermentation that takes place in the presence of the water kefir grains. It is typically done in a wide-mouth vessel (usually a glass jar), covered with a tight-weave cheesecloth, or a similar breathable fabric. Usually it lasts 24-48 hours at room temperature, at which point the grains are strained. The liquid can be consumed at this point or it can go on to be flavored in secondary fermentation or in bottle conditioning.

Secondary fermentation of water kefir is optional and takes place after primary fermentation and after the water kefir grains have been removed (strained) from the rest of the liquid. In the absence of the grains, any flavoring ingredient can be added to the liquid. Fruit, teas, herbs, and extracts are common examples. It is typically done in the same or similar vessel that was used in primary fermentation. Adding bulky flavorings at this point has the benefit that they can be strained out and left behind when it comes time to bottle the water kefir, ultimately producing a cleaner and clearer product. For water kefir, this step usually lasts 1-4 days.

Bottle conditioning is also optional and is sometimes referred to as a secondary fermentation. As the name implies, it is done in a bottle that can withhold pressure and typically sugar and/or flavorings are added for taste, or for carbonation production, or both. Usually it lasts 1-4 days for water kefir. The important thing to know about bottle conditioning is that sugar, added at this step or residual from the previous fermentation, can and will be converted to carbon dioxide, given the necessary conditions. You should TAKE CAUTION when bottle conditioning anything in glass bottles as they can be VERY DANGEROUS if over-carbonated. Follow the time recommendations for primary fermentation (24-48 hours) and bottle conditioning (24-48 hours) carefully and be sure to move your bottles into the fridge after the bottle conditioning phase. ROOM TEMPERATURES GENERALLY ALLOW FURTHER CARBONATION TO DEVELOP WHILE REFRIGERATION TEMPERATURES WILL ARREST THE FERMENTATION AND STOP FURTHER CARBONATION FROM DEVELOPING. USE OF FLIP-TOP OR SCREW CAP BOTTLES ARE RECOMMENDED TO ALLOW RELEASE OF EXCESS CARBONATION SHOULD IT OCCUR.

General Flavoring Considerations

Citrus or small pieces of dried unsulfured fruit work well in primary fermentation (I put lemon in almost every batch). Everything else should be added to secondary fermentation or in bottle conditioning (WITH CAUTION!).

Fruits: 1-2 slices, berries, pieces per quart water kefir.

Fruit Juice: 1/4 cup juice per quart kefir water kefir. Lemon, grape, and orange are good. Flavor Extracts – 1/2 TBSP. extract per quart water kefir. Vanilla and orange peel are good.



Water Kefir Recipe (basic)

- Makes about 1 quart

4 TBSP. rehydrated Water Kefir Grains

4 TBSP. Sugar*

4 cups Water (un-chlorinated)

3/4 tsp. Sugar (optional for bottle conditioning)

*50% white sugar: 50% brown/turbinado/molasses/coconut sugar

Dissolve sugar in water and add grains to a 1-quart jar. Cover jar with tight-weave cheesecloth, fastened with a rubber band. Store at room temperature for 24-48 hours. After desired flavor is achieved, strain out grains. Water kefir can be chilled and consumed immediately or a secondary or bottle conditioning step can be done. Adding sugar at bottling will provide more carbonation. Add 3/4 tsp. sugar (first dissolved in a small amount of water or water kefir) if desired and funnel into pressure-tolerant bottles, leaving a about a half-inch head space in bottle. Store at room temperature for 1-2 days to carbonate. Move to a refrigerator to prevent over-carbonation. Consume within one week for best flavor.

Water Kefir Recipe (with fruit)

- Makes about 1 quart

4 TBSP. rehydrated Water Kefir Grains

4 TBSP. White Sugar

4 cups water (un-chlorinated)

A wedge of citrus, a piece of unsulfured dried fruit (i.e. one or two raisins, an apricot, a slice of lemon). 3/4 tsp. Sugar (optional for bottle conditioning)

Dissolve sugar in water and add grains and fruit to a 1-quart jar. Cover jar with tight-weave cheesecloth, fastened with a rubber band. Store at room temperature for 24-48 hours. After desired flavor is achieved, strain out grains. Water kefir can be chilled and consumed immediately or a secondary or bottle conditioning step can be done. Adding sugar at bottling will provide more carbonation. Add 3/4 tsp. sugar (first dissolved in a small amount of water or water kefir) if desired and funnel into pressure-tolerant bottles, leaving a about a half-inch head space in bottle. Store at room temperature for 1-2 days to carbonate. Move to a refrigerator to prevent over-carbonation. Consume within one week for best flavor.



Coconut Water Kefir Recipe*

- Makes about 1 quart

4 TBSP. rehydrated Water Kefir Grains

4 cups Coconut Water

3/4 tsp. Sugar (optional for bottle conditioning)

Add grains and coconut water to a quart jar. Cover jar with tight-weave cheesecloth, fastened with a rubber band. Store at room temperature for 24-48 hours, tasting after 24 hours. As there is less sugar in coconut water, it ferments faster and will become sour faster than traditional water kefir. After desired flavor is achieved, strain out grains. Water kefir can be chilled and consumed immediately or a secondary or bottle conditioning step can be done. Adding sugar at bottling will provide more carbonation. Add 3/4 tsp. sugar (first dissolved in a small amount of water or water kefir) if desired and funnel into pressure-tolerant bottles, leaving a about a half-inch head space in bottle. Store at room temperature for 1-2 days to carbonate. Move to a refrigerator to prevent over-carbonation. Consume within one week for best flavor.

*Coconut water does not have enough sugar nor nutrient to sustain water kefir grains indefinitely. It is recommended that you alternate grains between coconut water and traditional water kefir recipes to maintain their health. Another option is to use your excess grains on coconut water until they no longer produce a good product and then discard them (or add to a smoothie!).

Ginger and Lemon Water Kefir Recipe

- Makes about 1 quart

4 TBSP. Rehydrated Water Kefir Grains

4 TBSP. White Sugar

4 cups water (un-chlorinated)

1/8 wedge of Lemon

2-3 inch knob of ginger, grated and juiced* (for bottle conditioning)

Juice from 1 lemon, ~ 2 TBSP. (for bottle conditioning)

3/4 tsp. Sugar (optional for bottle conditioning)

*To juice ginger, grate using a hard cheese grater or microplane and squeeze the grated pieces in cheesecloth. Alternatively, ginger can be sliced and added directly to bottle for a mild ginger flavor.

Dissolve sugar in water and add grains and lemon to a 1quart jar. Cover jar with tight-weave cheesecloth, fastened with a rubber band. Store at room temperature for 24-48 hours. Strain out grains and add ginger and lemon juice to the remaining liquid. Water kefir can be chilled and consumed immediately or a secondary or bottle conditioning step can be done. Adding sugar at bottling will provide more carbonation. Add 3/4 tsp. sugar (first dissolved in a small amount of water or water kefir) if desired and funnel into pressure-tolerant bottles, leaving a about a half-inch head space in bottle. Store at room temperature for 1-2 days to carbonate. Move to a refrigerator to prevent over-carbonation. Consume within one week for best flavor.



Chai Water Kefir Recipe

- Makes about 1 quart

4 TBSP. Rehydrated Water Kefir Grains

4 TBSP. White Sugar

4 cups water (un-chlorinated)

1/8 wedge of Orange

1/2 cup of strongly-brewed Chai tea (for bottle conditioning)

1/2 TBSP. vanilla extract (for bottle conditioning)

1-2 inch knob of ginger, grated and juiced* (for bottle conditioning)

3/4 tsp. Sugar (optional for bottle conditioning)

*To juice ginger, grate using a hard cheese grater and squeeze the grated pieces in cheesecloth. Alternatively, ginger can be sliced and added directly to bottle for a mild ginger flavor.

Dissolve sugar in water and add grains and orange to a 1-quart jar. Cover jar with tight-weave cheesecloth, fastened with a rubber band. Store at room temperature for 24-48 hours. Strain out grains and add chai tea, vanilla extract, and ginger juice to remaining liquid. Water kefir can be chilled and consumed immediately or a secondary or bottle conditioning step can be done. Adding sugar at bottling will provide more carbonation. Add 3/4 tsp. sugar (first dissolved in a small amount of water or water kefir) if desired and funnel into pressure-tolerant bottles, leaving a about a half-inch head space in bottle. Store at room temperature for 1-2 days to carbonate. Move to a refrigerator to prevent over-carbonation. Consume within one week for best flavor.

Turmeric, Ginger, and Lemon Water Kefir Recipe

- Makes about 1 quart

4 TBSP. Rehydrated Water Kefir Grains

4 TBSP. White Sugar

4 cups water (un-chlorinated)

1/8 wedge of Lemon

1/2 tsp. ground Turmeric

1-2 inch knob of ginger, grated and juiced* (for bottle conditioning)

Juice from 1 lemon, ~ 2 TBSP. (for bottle conditioning)

3/4 tsp. Sugar (optional for bottle conditioning)

*To juice ginger, grate using a hard cheese grater and squeeze the grated pieces in cheesecloth. Alternatively, ginger can be sliced and added directly to bottle for a mild ginger flavor.

Dissolve sugar in water and add grains and lemon to a 1-quart jar. Cover jar with tight-weave cheesecloth, fastened with a rubber band. Store at room temperature for 24-48 hours. Strain out grains and add turmeric, ginger and lemon juice to remaining liquid. Water kefir can be chilled and consumed immediately or a secondary or bottle conditioning step can be done. Adding sugar at bottling will provide more carbonation. Add 3/4 tsp. sugar (first dissolved in a small amount of water or water kefir) if desired and funnel into pressure-tolerant bottles, leaving a about a half-inch head space in bottle. Store at room temperature for 1-2 days to carbonate. Move to a refrigerator to prevent over-carbonation. Consume within one week for best flavor.