



## INSTRUCTIONS

### Before You Begin:

- The water kefir grains you received were shipped in a dehydrated state. This ensures they are shelf stable and can make the trip more safely.
- You have received two teaspoons of dehydrated water kefir grains which will rehydrate to approximately 3-4 tablespoons and culture up to three quarts of water kefir per batch. The grains you received may be brown in color due to being grown in unrefined sugar containing molasses. The color is not permanent and will fade if the kefir grains are cultured with white sugar.
- We recommend using glass jars (such as canning jars) and wooden utensils for culturing water kefir.
- Do not consume any kefir which smells, looks or tastes unpleasant.

### Supplies:

- One glass jar : Quart to Half Gallon
- One plastic or wood stirring utensil (we recommend avoiding metal when working with kefir grains)
- One towel or paper coffee filter to use as a covering for the jar
- Water kefir grains
- $\frac{1}{4}$  cup organic sugar per quart of water:
  - Evaporated cane crystals or unprocessed sugars such as Rapadura or Sucanat work best;
  - Honey can be used but is antibacterial in nature and will weaken the culture over time
- Water (non-chlorinated)
  - Well water or spring water is best due to higher mineral content
  - We do not recommend using water filtered through a carbon activated filter (e.g. Britta) or reverse osmosis water due to the depleted mineral levels.
  - If using tap water, remove the chlorine prior to making water kefir by either boiling the water and allowing it to cool or by aerating the water using a blender.

### Rehydrating Water Kefir Grains:

1. Dissolve 4 to 6 tablespoons of sugar in 4 cups water (you will likely need to heat the water so the sugar will dissolve). Be sure to allow the water to cool to room temperature before proceeding to the next step.
2. Place the dehydrated kefir grains in the water and cover with a towel or coffee filter secured with a rubber band. Allow the mixture to sit for 3-4 days until the grains are plump. Do not allow the mixture to sit for longer than 5 days.
3. Once the grains are rehydrated, follow the instructions below for making water kefir.

### Making Water Kefir:

1. To make a quart of water kefir, dissolve  $\frac{1}{4}$  c. sugar in a small amount of hot water. If making two quarts of water kefir, use  $\frac{1}{2}$  cup of sugar. Add enough cool water to almost fill the jar leaving 1-2 inches of headspace.
2. When the water has cooled to room temperature, add the kefir grains. Cover the jar tightly with a towel and rubber band to keep out fruit flies and ants.
3. Allow the kefir to culture for 24 to 48 hours. 24 hours will yield a sweeter water kefir. However, if you are sensitive to sugar, culture the kefir for 48 hours to give the grains a chance to consume a larger portion of the sugar. Do not let the kefir grains culture longer than 72 hours. As the kefir grains culture, you may notice tiny bubbles forming and traveling to the water surface (do not be concerned if no bubbles appear, see below).
4. Once the kefir has cultured for the desired period of time, strain off the finished liquid into a separate container (use a fine mesh plastic strainer if possible; stainless steel is acceptable if necessary) and cover with a tight lid. Finished water kefir does not require refrigeration, but can be refrigerated if you desire a cold beverage.
5. Add the grains to a new batch of sugar water and proceed with your next batch.
6. Please note, it is common for kefir grains not to appear active for the first few weeks. This is not an indication of whether they are working, rather dehydrated kefir grains can simply take some time to become fully active. Please see the "Troubleshooting" section below for more information.
7. If you are culturing multiple products (e.g. different varieties of yogurt, buttermilk, kefir, Kombucha, etc.) be sure to keep a distance of at least several feet between cultures so they don't cross-contaminate each other. Over time, cross-contamination will weaken the cultures.

## TROUBLESHOOTING

- For extensive troubleshooting information, please visit our website: <http://www.culturesforhealth.com/troubleshooting>
- After rehydration, you may not see very many (or any) bubbles forming in the liquid. That's okay and does not indicate a problem. Often the bubbles are so tiny and infrequent, you would need to watch very carefully for an extended period of time. Transfer the grains to new sugar water and proceed with making your first batch.

*See more troubleshooting information on page two.*

- To determine if the grains are “working”, simply taste the liquid before and after the fermentation process. Although finished water kefir will still be sweet, it will not be as sweet as the original sugar water. Also, the color of the liquid will change over the 48 hour fermentation period (generally will become lighter in color).
- It can take a few batches before your kefir grains effectively remove sugar from the water, this is a normal part of the process.
- Water kefir carbonation may vary greatly from batch to batch. A lack of carbonation does not indicate a problem with the water kefir grains. Factors influencing carbonation include the type of sugar used (using less processed sugars such as Rapadura or adding molasses to white sugar will generally produced a more carbonated beverage). After fermentation (following removal of the grains), fruit juice can be added to the finished kefir and the mixture stored in a container with a tight lid for several days to improve carbonation (use caution when removing the lid!). See the Recipe section below for more information.
- Water kefir grains are occasionally reluctant to multiply. Even if the kefir grains do not multiply, they can be used repeatedly to brew water kefir.

#### **Additional Information:**

- Water kefir grains can sit directly in the liquid or can be contained in a large fabric pouch. Be sure the pouch is large enough to accommodate the multiplication of kefir grains should it occur. The pouch may need to be secured with a rubber band to ensure the kefir grains do not escape.
- Water kefir can be flavored dried or fresh fruit, flavoring extracts or juice. Dried fruit can soak in the finished water kefir for up to a week. Fresh fruit must be changed daily.
- Water kefir grains can be used with fruit juice rather than sugar water. We recommend caution however as some juices (citrus for example) can harm the grains. Please keep in mind that juice can be very hard on the kefir grains and we recommend waiting until your kefir grains multiply and you have extras before culturing some kefir grains in juice—see our website for more information.

**For more information on making Water Kefir and other cultured foods including How-to Videos, Recipes, Ideas and more, please visit our website: [www.culturesforhealth.com](http://www.culturesforhealth.com).**

## **RECIPES**

### **Water Kefir Lemonade**

Make water kefir and remove the kefir grains. Add ¼ cup lemon juice to each quart of water kefir. Serve cold.

### **Orange Zest Water Kefir**

Add the kefir grains and several strips of organic orange zest (not the juice) to a standard batch of sugar water. It is important to use an organic orange to avoid exposing the kefir grains to pesticides. Allow the water kefir grains to culture 24-48 hours. Remove and discard the orange zest. Remove the kefir grains and serve the kefir cold.

### **Cream Soda Water Kefir**

Make water kefir and remove the kefir grains. Add 2-3 tsp. quality vanilla extract per quart of water kefir

### **Blueberry-Pomegranate Water Kefir**

Make water kefir and remove the kefir grains. Add ½ cup blueberry-pomegranate juice per quart of water kefir. Serve cold. *Variation:* Use cherry juice or your favorite juice flavor.

### **Raspberry Juice Water Kefir**

Add kefir grains to 1-2 quarts of organic raspberry juice. Allow the juice to culture for 24-48 hours. Please note, a longer fermentation period will yield a higher alcohol content due to the amount of sugar in the juice. Please use good judgment if serving kefir juice to children.

### **Fruit Flavored Water Kefir**

Make water kefir and remove the kefir grains. Add fresh or dried fruit to the water kefir. If using fresh fruit, change the fruit out every 24 hours; dried fruit can be changed out as infrequently as once a week. Allow the fruit and kefir to sit for 1-7 days. Remove and discard the fruit. Please note, water kefir can be cultured and flavored it at the same time by having both fruit and kefir grains sitting in the sugar water. If using this method be sure to use low acidic fruits (i.e. avoid pineapple, orange, etc.) and confine either the kefir grains or the fruit in a small cloth bag to avoid the disintegrating fruit becoming intertwined with the kefir grains. Be sure to keep the cloth bag submerged in the liquid to avoid attracting mold!

### **Grape Juice Water Kefir**

Add kefir grains to 1-2 quarts of organic grape juice. Allow the juice to culture for 24-48 hours. Please note, a longer fermentation period will yield a higher alcohol content due to the amount of sugar in the juice. Please use good judgment if serving kefir juice to children. *Variation:* Use organic apple juice

### **Water Kefir “Soda”**

Make water kefir and remove the kefir grains. Combine four parts water kefir and one part fruit juice in a truly air-tight bottle such as a Grolsch-style flip cap bottle or an old wine bottle with a new cork. Allow the mixture to sit for several days at room temperature before refrigerating. Adding the juice continues to feed the live yeast and bacteria in the water kefir (even though the kefir grains themselves have been removed). This process creates gas and normally some level of carbonation. Use caution when opening the bottle! *Variation:* Use water kefir made with fruit juice and bottle as directed above.

### **Coconut Water Kefir**

Add the kefir grains to 1-2 quarts coconut water. Allow the mixture to culture for 24-48 hours before removing the kefir grains.

### **Herbal Infusion Water Kefir**

Mix one part finished water kefir (kefir grains removed) with one part herbal infusion (e.g. Nettle Leaf, Red Raspberry Leaf, etc.). Herbal infusions can be made by combining a handful of fresh or dried herbs with one quart boiling water. Allow the herb and water mixture to sit for 6+ hours. Be sure the herbal infusion is completely cooled prior to mixing it with the finished water kefir.

### **Water Kefir Smoothie**

Use water kefir as the liquid base in your favorite smoothie recipe.