

WATER KEFIR



What is Water Kefir?

You may have probably heard of Kefir, but are not sure what it is, or you have always thought it's a milk product... well, this is what happened to me before I became better educated... I had not only heard of Kefir, but actually been including it in my dogs' diet for a while before I learned there are actually 2 different types of Kefir: Milk and Water Kefir. Some recognize yet a 3rd type in Kombucha Tea, and call it Tea Kefir. Both Milk and Water Kefir are the same thing, Kefir, although adapted to grow on different culture media. Water Kefir grains are different from those of Milk Kefir: they are almost translucent and loose.

You may be asking yourself why I say that I was including Kefir in my dogs' diet and not my own. It's pretty simple: I don't like milk or milk products, and the only Kefir I knew was the milk product commonly found in grocery stores or health food stores. So, you can imagine how happy I was to learn I could also benefit from taking Kefir without the

milk part of it! Like me, there are many people out there who either can't or prefer not to take any milk, but would love to benefit of Kefir's multiple healthy properties, for whom this type of Kefir deems ideal. Water Kefir can be taken in much more quantity than Milk Kefir (from 1 to 3 liters daily), and it is said that Water Kefir's properties are far superior to those of Milk Kefir's.

So now that you know about this other type of Kefir, you probably still don't know what Kefir is. The word "Kefir" is thought to have originated from the Turkish word "Keif" which means "good feeling". Kefir is a polysaccharide structure where several non-pathogenic, but friendly or healthy bacteria and yeast live in symbiosis. While Milk Kefir has been compared to yogurt, Kefir's microflora is much more complex. The exact composition of microorganisms that form the grains usually varies slightly, depending on the media where they are cultured, and so Water and Milk Kefir differ in some microorganisms that may specifically grow on milk and not fruit, and the other way around. Also, depending on the fruits used to culture Water Kefir, we may be adding new friendly yeast and bacteria to our grains. Typical composition of Water Kefir grains is: *Lactobacillus brevis*, *Lactobacillus casei rhamnosus*, *Lactobacillus alactosus*, *Lactobacillus casei casei*, *Lactobacillus pseudoplantarum*, *Lactobacillus plantarum*, *Streptococcus lactis*, *Streptococcus cremoris*, *Leuconostoc mesenteroides*, *Saccharomyces florentinus*, *Saccharomyces pretoriensis*, *Kloeckera apiculata*, *Candida lambica*, *Candida valida*.

What are the Health Benefits of Water Kefir?

Water Kefir, due to its diuretic, depurative and regenerative properties, can be of benefit in a broad variety of health conditions. What follows is a list of conditions it can help to improve, and suggested dosage, as I have found listed in the several sources listed at the end of this document. Note that this document is merely informational and in no case is the information below meant to substitute medical diagnosis and/or treatment, nor should the product be used to substitute medical care. Always consult with your physician (or if you plan on using it on your animal companions, with your veterinarian) about your (or your animal's) health condition. Kefir is no "cure-all" or universal remedy. It can only complement and help appropriate medical treatment due to its detoxifying and immunity-building effects.

As a natural product, Kefir works by slowly regulating the organism and helping it become healthier. If you expect a rapid overnight result, then forget about it. Water Kefir can be indicated in nervous disorders, internal ulcers, bronchial catarrh, sclerosis, myocardial infarction, liver and gall bladder disorders, kidney problems, stomach and intestinal diseases, diarrhea or constipation, anemia, allergies, dermatitis and other skin problems such as eczema. It's use on an ongoing basis proves to have excellent effects in

convalescence after serious diseases. It can also help regulate blood pressure and weight control, and has good results during pregnancy and abdominal feminine discomfort.

Kefir prevents intestinal putrefaction, which is the cause of multiple disorders, and contributes to the body's depuration. It doesn't alter the digestive process. It should be drunk on a daily basis, and depending on the condition, once or more times a day. In chronic conditions, great quantities of Kefir should be drunk, 3 times daily, about 1/2 a liter (approx. 2 cups) each time.

The table below indicates suggested doses indicated for some conditions:

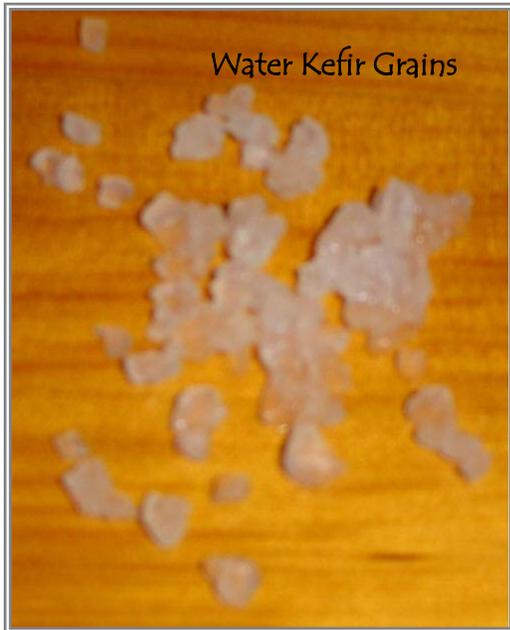
| | |
|---------------------------------------|--|
| Nervousness | 1 liter daily |
| Ulcers | 1 liter daily (they disappear after 2 months) |
| Asthma | 1 liter daily (during a longer time) |
| Bronchial Catarrh | 1 liter daily |
| Anemia / Leukemia | 1 to 2 liters daily (check blood test values after 2 months) |
| Sclerosis | 1 liter daily |
| Dermatitis / Eczemas / Skin Allergies | 1/2 liter daily + local application over affected skin letting it dry. Wash hands and face (after 2 to 4 weeks allergy disappears) |
| Cystitis | 1 liter daily |
| Kidney Problems | 1 liter daily |
| Gall Bladder Disorders | 1 liter daily |
| To regulate Blood Pressure | 1/2 liter daily |

Where Can I find the Grains?

Water Kefir grains are not commercialized, probably because this mother culture resists being manipulated and adulterated for commercial purposes. Maybe this is the main reason why Water Kefir is not paid the attention it deems, and is so unknown or forgotten... so we're really dealing with a millenary culture that has always passed from someone's hands to someone else's like a legacy. Grains, thus, are usually obtained from someone who has them, then you give to someone else, and big sharing chains are formed introducing them to other folks and regions in the world. If you're interested in getting some, simply ask someone you may know that has it, if they may be willing to share with you. If you'd like to check out with me, please email me at homeovet@eresmas.com. Note that I may or not have excess to share at that moment or may already have a waiting list.

There are also some online Kefir grains sharing sites where you can try asking for some. The following web page offers a list of such sites in English language: http://www.seedsofhealth.co.uk/resources/find/find_kefir.shtml

Alternatively, if you happen to have Milk Kefir grains, you may try "converting" them into Water Kefir grains. I have read some folks have achieved this successfully, but it



takes time since the microflora needs to adapt to the new culture medium, and for a time it will still have the Kefiran of Milk Kefir. I personally don't recommend this option, as it is not that you can switch your grains back and forth from milk to water and the other way around.

Since Water Kefir grains are so hard to come by, but multiply a lot and very rapidly, I suggest you never throw away your excess... kindly give it to a friend or relative or coworker, who may also benefit from it, or offer it for free through your local Health Food Store so other people have access to it as well. In this materialistic world, we really need more acts of generosity, giving away stuff not

expecting anything in return. Aren't we already sufficiently paid by knowing we're spreading health? Health is something money can't buy. Should you decide to ship it to someone else, it is fine to have the recipient cover the shipping costs, but it is obviously up to you. To ship the grains, you may either want to dehydrate them and put them in a plastic bag inside a padded envelope, or place them in a small plastic bag or small container that can be sealed with water and sugar (read the storing methods below) and then in a padded envelope.

Note: If you need to distribute information on Water Kefir along with your grains, please feel free to print out and distribute this document, as long as you do it for free.

How to Culture Water Kefir

So now we have our grains, and need to know how to brew the stuff... for this purpose, we will need the following utensils:

- 1 large broad opening glass container with lid – exact size depending on the amount of liquid per batch you want to make. If you make the basic recipe exactly as listed below, probably a 1.5 liter capacity container will suffice. If your glass container does not have a lid, you can simply cover it by placing a plate on top or with some plastic wrap or cloth tied with a rubber band around the opening.
- 1 strainer and/or pouch – depending on method used (see below).
- 1 spoon
- 1 glass jar

Note that the utensils used in the process should preferably not be metallic, as it is believed it is best for the grains not to touch any metals (although it doesn't seem to be critical if for example you use a metal strainer because you don't have another one), so you may want to use for example a wooden spoon and a plastic strainer (or made of some other material). I also suggest that you keep the utensils you decide to use for brewing Water Kefir solely for this purpose.

There are 2 known methods of dealing with the grains: the "loose grains" method and the pouch method. In the first one, you just toss the grains in the glass container along with all the other ingredients, so you will need to use a strainer for pouring each batch and washing the grains afterwards. The pouch method seems easier and better to keep your grains separate from other stuff you may want to add to the recipes (we will see there are many variations out there that can be done, adding herbs, etc. for added health benefits), and to manage the grains for washing purposes. You can easily make your own pouch with some porous cloth, like gauze, folding and sewing the sides together, and using a string to tie up the top. Just make sure there's more than enough room in it for the new grains to grow in there, as they multiply.

The following is a general basic recipe. If you'd like to make a larger batch, try to keep the same proportions of ingredients. But also, feel free to experiment with different fruits or sugar quantities until you find the one that works best for your own



Fermenting Water Kefir
Non-pouch Method

taste.

- 3 tbs. Water Kefir grains (also called Water Kefir Fungus)
- 50 g. Brown Sugar or Honey – you can use any preferred type of honey, and can also use white sugar or molasses as long as it is from sugar cane. For diabetic people, fructose should be used, saccharin and other such sweeteners are NOT suitable. (1 gram = 0.035274 ounce)
- 1 or 2 dried figs – or any other dried fruit you prefer like dried prunes, apricots, dates, raisins, etc. Fresh fruits are also suitable, but need to be changed daily, as opposed to the dried ones, which can be changed for new ones weekly.
- ½ lemon.
- 1 liter mineral or spring water – only water without any chlorine should be used, so tap water is not suitable unless it's filtered (1 liter = 4.399385 cup [Canada], 1 liter = 4 cup [metric], 1 liter = 4.2267528 cup [US])

Mix in the glass container and stir. There are 3 different brews you can make: 24, 48, and 72 hour fermentations. 72 hours is the maximum a batch should be let to ferment. Stir occasionally while it's fermenting. The longer it is allowed to ferment, the stronger



it becomes. Note that the carbonic acid increases each day, so if your container is airtight sealed, it could explode. Personally I like using a glass container slightly larger than the batch I'm going to make, so there's room for the gas in it, and just lightly cover it with a lid. Covering it is important so it doesn't become contaminated with strange microorganisms (although Kefir's own micro-flora maintains many pathogens at bay), and to prevent flies or other bugs from getting into it.

It is said that 24-hour Water Kefir acts like a laxative (I have personally not noted this effect on myself, so it may be an individual thing) and 48-hour Kefir regulates and reestablishes intestinal function.

The container should be stored away from direct sunlight to prevent heating and death of the microorganisms and at room temperature (away from extreme temperatures that kill the

Kefir grains) anywhere you like, as light is not a factor that really affects the fermenting process, so you can put it in a cabinet, on a shelf or on top of your kitchen counter in a corner for example. I personally like having it on my kitchen counter, so I can easily control the process and stir when needed.

It is normal for some grains and/or fruits to float in the water, as the gas makes them float.

Once the fermenting time has passed, strain the liquid, squeeze the juice of the half lemon used in it, and it's ready to take. The strained liquid is the Water Kefir, also called Kefired Water. Wash the grains under running water, clean the container (do not use soap) and start the whole process all over again for the next batch.

How Can I Store my Water Kefir Grains safely?

If for whatever reason, like going away on vacation or simply wanting to rest from taking kefir for a period of time or to just store or ship some excess grains, we need to stop culturing kefir, there are some ways to keep our grains preserved until we start brewing again.

- For some days (4-5 days), we can just put the grains in a small glass container with spring water and sugar.
- For a longer period of time, like a couple of months, we can freeze them by straining them well and placing them in a plastic bag or glass container in the freezer.
- For a longer period of time as well, we can dehydrate them. The process for this is as follows: Spread the grains over a plate. Cover with paper towel and place in a well ventilated area. Each day, turn over the grains to detach them from the plate, carefully so they don't break. The time it takes for them to dry depends on environmental ventilation and humidity. We will know they are dry when they become crystallized and not sticky. This method seems to be the preferred one by many to ship them, as they can conveniently be placed in a padded envelope, and shipped as a simple letter. However, if not well done, it can result in the death of the grains, so we have to be careful.

To hydrate the grains again after drying them or when we first get them, simply soak them in water at room temperature until they achieve the jelly consistency.

Water Kefir and Small Children

I have been asked about the age when children can start drinking Water Kefir. I haven't found any specific information on this regard. For Milk Kefir, however, I have read that they can start taking it at the same age they can start eating yogurt, so I assume it would be the same.

While I have also read that one must be cautious with little children and animals due to Water Kefir containing from 0.5% to 3% of alcohol, depending on fermenting time, process (air tight vs. loose lid) and sugar content, I have also read that the natives of the Caucasus Mountains as children drink Kefir like water, and these people have an average lifespan of 110 years. And we must also bear in mind that Milk Kefir has an alcohol content as well, it is not something exclusive of Water Kefir. On the alcohol content of Milk Kefir I have found it can vary from 0.06 % (Marshall 1984), up to a maximum of 3%, depending on fermenting process, temperature, time and type of culture used, being on average the alcohol content of home-brewed Milk Kefir around 0.5% with loose lid and 1% in air-tight sealed container. So, really not much of a difference, huh? And, also, brewing our own Water Kefir, we can seem to control this.

To be on the safe side, same as I indicate for animals below, we might want to brew 24 hour batches in a loose lid container, not shaking it much (since this also results in higher alcohol content), and adjust the quantities taken to at least half of what an adult would drink.

Can my Animal Companions take Water Kefir?

Several of my clients and myself share this healthy beverage with our dogs, and they love it. They too can benefit of its multiple properties! However, since they don't seem to have a problem, unlike me, with Milk Kefir, what I do is alternate both kinds for them – I use Goat's Milk Kefir I have access to, don't make it myself. But, I do really love the Water Kefir for their fasting days!! I can't tell much about cats because I have at this point very limited experience on how they may like Water Kefir, and the ones I know about refuse to drink it, which seems to me more a taste issue inherent to cats. Milk Kefir, however, should be perfectly suitable for them (unless they have milk protein intolerance or the sort), and I would assume it to be much more palatable for them than Water Kefir. Much like us, they have their own personal taste too!

As a general rule, I suggest that if you want to give it to your animal companion, offer some to them and watch how they react to it and/or do on it. Then, take it from there. To be on the safe side, there are a some things we may need to keep in mind:

- Adjust the quantity taken to their size. Perhaps it is perfectly fine to give a 50-70Kg dog the same quantity an adult human would drink (maximum 1 liter daily), but that is certainly not so for a 1.5-10Kg dog, for whom ¼ of that quantity would be much more suitable.
- Take into account the alcohol content and, as I have mentioned above for small children, try to brew the lowest alcohol content batches. I personally brew 24 hour batches in a loose lid container for both my dogs and myself, and do not store the strained kefir for more than 24-48 hours (we usually drink it before that time) – this is important also because Kefired Water continues to ferment in the jar due to all the good bacteria and yeast in it until all sugar is used up.
- Make sure the recipe you use does not have any ingredients that are toxic to your animal – this may apply to Grape Juice Kefir for dogs, or to certain herbs you add that have species-related toxicity. In this regard, I prefer to use honey to sugar in my recipes, not only because of my personal taste (I have tried both and like the one made with honey much better), but also because I consider it much healthier for my dogs (and myself).
- In general, bear the other caution notes I have listed for humans in mind too, as they also apply to your companion animal.

Recipes with Water Kefir

Here are some suggested commonly used recipes to change your drink for variety and/or added health benefits. There are many more out there, and, as said, feel creative and use your imagination and create your own personal recipes to your taste!

Note: when using herbs, always consult if they may not be contraindicated for your particular condition or with your current medication first. While they may provide many health benefits, they also have negative effects and drug interactions like any other drug.

Grape Juice Kefir

With our Water Kefir grains we can make this delicious grape juice beverage. If we use red grapes, over time our grains will become stained with the natural red pigments contained in the grapes, and so they will turn a dark color similar to that of the grapes, and will no longer be white, but there's nothing wrong with it. We may then just want to keep such grains for this specific recipe, and not for the basic or traditional water kefir recipe.

To make Grape Juice Kefir, a part of water and a part of Grape Juice are used, to which the kefir grains are added. It is optional to add some fresh mint leaves. Do not fill the glass container more than $\frac{2}{3}$ of its capacity so there's room for the gas. Close the container with the lid, and let it ferment for 24 hours. Strain the grape juice kefir, which changes to become similar to Champagne due to its bubbles content... actually, if you modify this recipe adding some unripe grapes, you can obtain a healthy Champagne substitute, an alternative with pretty similar flavor to real Champagne. For this, you'll need to add $\frac{1}{4}$ of the volume of unripe grape juice to $\frac{3}{4}$ of the volume of ripe grape juice. An alternative option to using the unripe grape juice is to replace it with lemon juice, adding the juice of 1 lemon per each 500ml of grape juice used, and fermenting as usual.

For this recipe, you can use bottled grape juice, as long as it is 100% natural juice without any additives. Although, when using freshly made grape juice, an added benefit of an additional yeast that naturally grows on fresh organically ripe grapes is obtained. It is that white film that can be seen on the grapes' peel. Either white or red grape juice can be used for the recipe.

Green Tea, Ginger and Cinnamon Kefir

Green tea in combination with ginger root and cinnamon has invigorating properties that help us recover vitality and well-being. We shouldn't drink more than a liter of this recipe a day, and no more than a glass at a time. And if drunk on a daily basis, let our body rest from the herbs every now and then (at least discontinue it for 1 month after 6 months of taking it).

Ingredients:

- 1 liter Water
- 2 tbs. Honey or Brown Sugar
- 2 tbs. Water Kefir grains – we may want to use the pouch method if using loose tea
- 3-4 slices fresh ginger root
- $\frac{1}{2}$ cinnamon stick
- 1 tbs. Green Tea or 1 Green Tea Bag
- 1 tbs. Dry Mint leaves (optional)
- $\frac{1}{2}$ lemon (optional) – we can add its juice after brewing it also

Make a tea with $\frac{1}{4}$ liter hot water (not boiling), the green tea, cinnamon and ginger (and the mint leaves if using them). Let it sit to cool covering it. Once it has cooled (remember if too hot we will kill our Kefir grains), pour it in your glass container. Add

the water Kefir Grains, the honey /sugar and rest of the water (and lemon if using it). Cover with lid, and let it ferment at room temperature from 36 to 48 hours in a dark place (inside a cabinet or closet), remembering to stir at least once per day. Drain and it's ready to drink like that or iced. You can also pour it in a bottle and store it in the fridge for a couple of days.

Dandelion Kefir

Dandelion (*Taraxacum officinale*) activates liver and kidney cellular metabolism, which favors bile and urine production. It is a herb that can help several conditions due to its properties and can be taken in different ways (check it out in any herbs book), but I'll point out that it is used in the so-called "Depurative Cures" that last from 4 to 6 weeks, and are usually done in Fall and Spring.

For this recipe, mainly Dandelion Flowers are used. It is optional to add other parts of the plant if more active principles are sought.

Ingredients:

- 1 handful fresh Dandelion flowers – 1/2 of dry flowers
- 1-2 Ginger root slices
- 1 liter Spring or Mineral Water
- 1 tbs. Honey
- 3 tbs. Water Kefir Grains – might want to use the pouch method
- 1 piece Licorice Root

Put all the ingredients in the glass container, cover with lid and let it ferment in a dark place for 24 hours. Strain and it's ready to drink.

Coconut Kefir

Coconut water is said to be a natural "saline solution" that has all the salts, sugars and vitamins needed. However, by itself it's too sweet for the body and taken in large quantities or over extended periods of time, it will induce an acid-base imbalance. By fermenting it, we change its potent sugars, and it becomes much better assimilated by the body. With the changes in this "Coconut Kefir", it deems an ideal isotonic drink.

Mainly unripe coconut water is used, because it has more quantity and it's sweeter than ripe coconuts. We can also add the ripe coconut water to our drink after it's brewed for flavor. If the coconut water is sweet enough, it won't need any added ingredients, just pull out the Water from the coconuts, pour it in the glass container, add the Water Kefir grains, cover it and let it ferment.

We can also add the fruit and blend it to make a nutritious "Coconut shake". Pull out the fruit from the shell, slice it, put it in the blender with water until a creamy consistency is achieved. Pour into the glass container, add the Water Kefir grains or Kefired Water, cover and let it ferment for at least 24 hours.

Strawberry Kefir

There are 2 ways you can do this delicious recipe that I explain below. The first one is bound to damage your grains if done on an ongoing basis, so you may want to separate some excess grains for this purpose or use the second one.

Use 10-12 Strawberries (more if you use the wild small ones) – puree or juice all of them except 2 that you can toss in whole. Fill container up to 1 liter with spring water. So, basically, you use one part of strawberry juice and one part water. Add 3 tbs. Water Kefir Grains, 2 teaspoons of Honey and half a lemon. Cover and let it ferment for at least 24 hours. It is normal for your grains to get tinged in a pink color from the natural pigments in the strawberries when doing this version. Strain and squeeze the half lemon in it as usual.



Alternatively, you can make your strawberry juice, and add Kefired Water with active fermentation to it, cover and let it ferment for 24 hours.

Sources Used for the Elaboration of this Document:

In Spanish:

<http://nutribiota.midire.com/>

<http://lanaturaleza.hypermart.net/kefir-agua.htm>

<http://www.pipirimosca.com/kefir/castellano.html>

<http://personal.redestb.es/martin/kefir.htm>

In English:

<http://users.chariot.net.au/%7Edna/kefirpage.html>

<http://www.torontoadvisors.com/Kefir/kefir.htm>

<http://www.geocities.com/wallstreet/9347/KEFIR.htm>

<http://www.kefir.biz/>