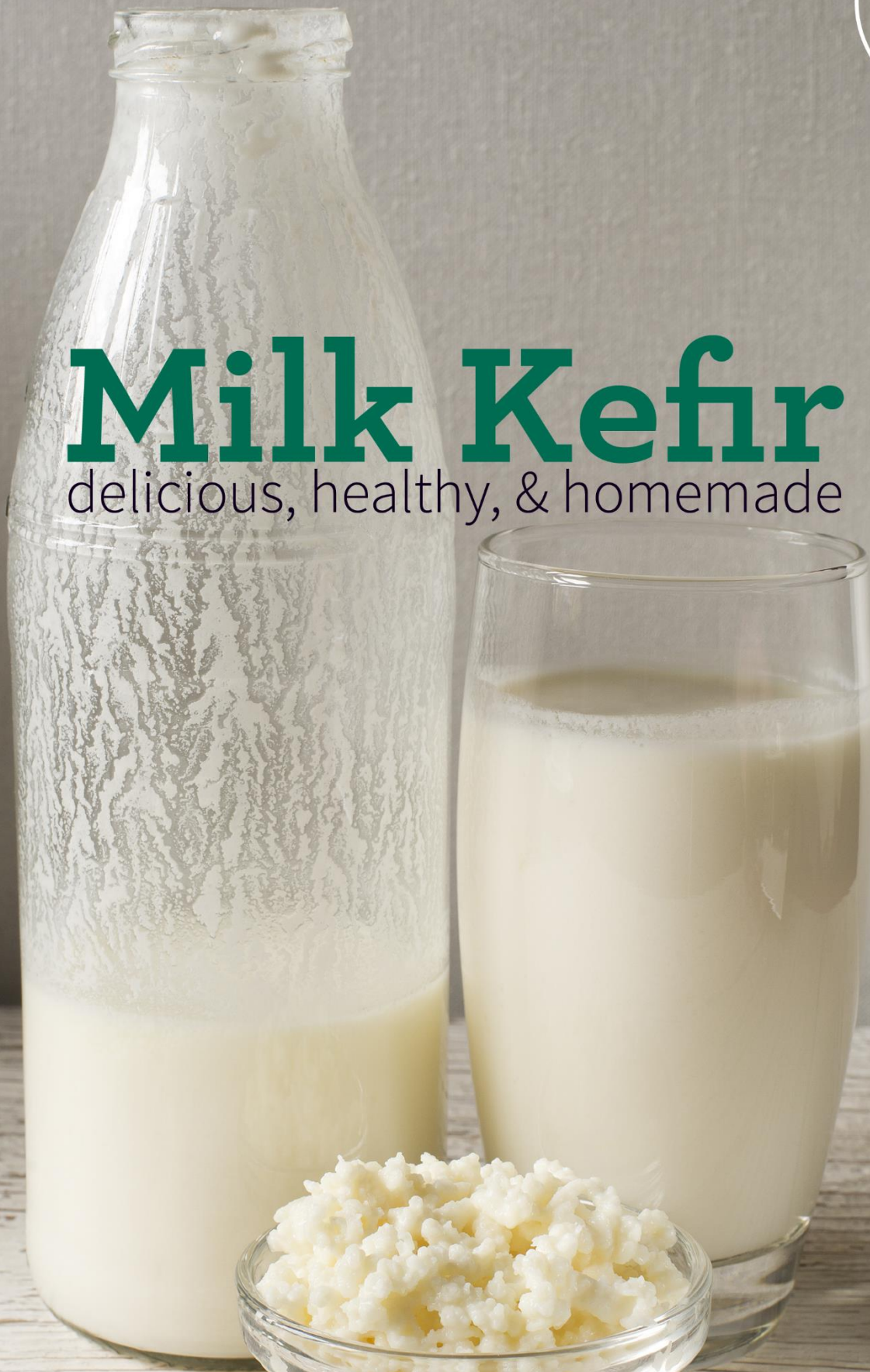




Milk Kefir

delicious, healthy, & homemade



*a guide from
Cultures for Health*



a guide by Cultures for Health

MILK KEFIR

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Table of Contents

INTRODUCTION TO KEFIR

History 12

Names and Pronunciations 13

How it Works 13

Basic Nutritional Information..... 14

Composition of Milk Kefir Grains: Bacteria & Yeasts..... 16

The Difference Between Yogurt and Kefir..... 18

Incubation Type 18

Types of Bacteria Present 19

Kefir Contains Yeasts 19

Texture & Flavor 19

Choosing a Kefir Culture: Grains vs. Powdered Starter 20

Kefir Grains and Kefir Starter: What They Have in Common 20

Bacteria Strains..... 20

Reusability..... 21

Culture Care..... 21

Cost..... 22

Bottom Line..... 22

Using Kefir in Everyday Recipes 23

Even More Creative Ways to Use Dairy Kefir 24

Savory 25

Sweet 26

Kefir: The Sustainable Dairying Culture 28

Milk Kefir.....	29
Kefired Sour Cream.....	29
Kefir Butter.....	30
Soft Kefir Cheese.....	30
Hard Kefir Cheese.....	30
Next Up.....	31

INTRODUCTION TO KEFIR

Rehydrating Milk Kefir Grains 33

Prepare the Rehydration Solution.....	33
Activating the Kefir Grains.....	34
Signs the Rehydration Process is Complete.....	35
Signs of Problems during Rehydration.....	35
Kefir Culturing Containers.....	37
Covering the Culturing Container.....	39
Other Optional Supplies for Making Dairy Kefir.....	39
Animal Milk vs. Alternative Milks.....	40
Fat Content.....	41
Homogenization.....	41
Pasteurized vs. Raw.....	41
Negative Effects of Freezing.....	43
How This Affects Your Cultured Dairy Products.....	44
Next Up.....	45
Prepare the Rehydration Solution.....	45
Activating the Kefir Grains.....	45

Signs the Rehydration Process is Complete 45

Signs of Problems During Rehydration 45

Next Steps..... 45

HOW TO MAKE MILK KEFIR

The Basic Process 47

Culturing the Kefir 47

How to Know It Worked 48

Normal Variations vs. Signs of Problems 49

Harvesting the Kefir 51

How to Make Kefir 54

Signs the Kefir is Done Culturing 55

Reculturing the Kefir 55

Why Some Choose Goat Milk over Cow Milk 58

Is There a Difference in Procedure?..... 59

How to Make Goat Kefir 59

Coconut Milk Kefir 61

Coconut Water Kefir 62

Water Kefir..... 62

Ideas for Using Coconut Milk Kefir: 65

Reducing the Lactose Content of Kefir 66

What is Lactose?..... 66

Lactose in Kefir..... 66

How to Lower the Lactose Content of Kefir 67

BITS AND BOBS

How to Take a Break from Making Kefir 71

Encouraging Milk Kefir Grains to Multiply 71

Give Them an Optimal Temperature..... 72

Feed Them What They Need 72

Feed Them Frequently 72

Keep the Grains Smaller 73

Straining Kefir: Thick Kefir and Kefir Whey 74

How to Strain Kefir 74

Ways to Use Whey 74

Flavoring Milk Kefir..... 77

What is a Second Fermentation?..... 77

What are the Flavor Benefits of a Second Fermentation? 78

What are the Other Benefits of a Second Fermentation? 78

What Flavor Additions Can I Make in the Second Fermentation? 78

Troubleshooting & FAQ 80

General 80

Milk Kefir Grains 88

HOW TO USE KEFIR

Five Ways to Use Kefir 99

Salad Dressing..... 99

Ice Cream..... 99

Soup..... 99

Smoothies 100

Baking: Cakes, Breads and Muffins 100

How to Use Kefir to Start Sourdough 101

Make a Kefir Sourdough Starter 101

Use Milk Kefir Directly as the Sourdough Starter..... 102

Benefits of Using Kefir as Leavening 102

The Amazing Variety of Kefir Dairy Products 103

Kefir Sour Cream..... 103

Kefir Cream Cheese..... 103

Kefir Butter 104

Soft Kefir Cheese 104

Hard Kefir Cheese..... 104

A Complete Guide to Cultured Smoothies..... 106

The Smoothie Base 106

Add-Ins..... 107

Recipes 107

Make Extra for Popsicles..... 108

RECIPES

Dips 110

Cultured Dairy Onion Dip..... 110

Cultured Dairy Dill Dip..... 112

Cultured Dairy Ranch Dip..... 114

Creamy Kefir Horseradish Dip 116

Kefir Artichoke Dip 117

Turkish Kefir Dip..... 118

Kefir Ranch Dip..... 119

Sundried Tomato, Basil, Hazelnut, and Kefir Dip 120

Blue Cheese and Walnut Kefir Dip 121

Flavored Kefir Drinks 122

Kefir Eggnog 122

Chai-Spiced Milk Kefir 124

Pancakes 125

Apple Cinnamon Kefir Pancakes Recipe 125

Cultured Dairy Soaked Gluten-free Buckwheat Pancakes 127

Salads..... 129

Creamy Orange Kefir Fruit Salad 129

Kefir Cucumber Salad 131

Smoothies..... 132

Instant Probiotic Smoothie 132

Cranberry Smoothie..... 134

Apple Pie Smoothie..... 135

Banana Smoothie 136

Basic Fruit Smoothie 137

Blueberry Smoothie 138

Healthy Smoothie 139

Orange Smoothie 140

Pumpkin Smoothie 141

Mango Smoothie 142

Watermelon Smoothie 143

Tropical Smoothie 144

Cantaloupe Kefir Smoothie 145

Peachy Kefir Smoothie 146

Tasty Treats 147

Kefir Ice Cream Recipe 147

Chocolate Kefir Popsicles Recipe 149

Cultured Ice Cream (and how to make it without a machine) 150

Kefir Dessert Sauce Recipe 152

Whipped Cultured Cream to Top Your Dessert 153

Make a Cultured Enzyme-rich Breakfast Parfait 155

INTRODUCTION to KEFIR

everything you need to know



For a long time yogurt, the cultured milk product that very likely originated in Bulgaria was the only cultured milk that westerners were aware of, besides their beloved buttermilk and sour cream.

Recently, though, there has been an interest in the cultured milk product known as kefir. Similar to yogurt in that it has a delightful tang, kefir is just a bit thinner than yogurt and is often called a “drinkable yogurt.”

Kefir is very different from yogurt, but one of the most exciting differences is that kefir is a mesophilic culture while most yogurts are thermophilic cultures. What this means is that kefir can be made at room temperature on your countertop while yogurt is usually made in a 100° to 112°F environment.

That is just one of the many reasons that people are getting excited about kefir.

History



Milk kefir, like most cultured foods, has a long and rich history rooted in simple agrarian culture. It is most likely that kefir was developed by accident centuries ago by the people of the Caucasus Mountains. The kefir grains were then a result of the symbiotic relationship between the beneficial bacteria and the yeasts and other organisms in the milk kefir.

Kefir grains are a gelatinous mass harboring a generous variety of bacteria and yeast from which one can make continual batches of kefir. Milk kefir can also be made from a powdered kefir starter for those who do not wish to maintain kefir grains by feeding them on a daily basis.

(There's no actual grain in kefir grains – they are just called “grains” because they are small and numerous, like grains of sand.)

Many purists argue that true kefir can only be made from kefir grains. Kefir grains contain dozens of microorganisms, including bacteria and yeasts, some of which haven't even been identified. Therefore, the powdered starter couldn't possibly mimic the microorganism content and richness of the kefir made from grains.

Names and Pronunciations

The word kefir is said to stem from the Turkish word *keif*. *Keif* loosely translates to “good feeling,” most likely because of how consuming kefir made the people of the Caucasus feel.

Kefir has been pronounced in a host of ways:

- *Ke-fer* is one way that people pronounce it, sounding almost French with its short e followed by a long ee sound.
- *Kee-fur* is one of the more common ways it is pronounced in America. The long ee sound followed by the word fur is a more blunt pronunciation and perhaps the most popular.
- *Keh-fur* is another pronunciation that you will commonly hear and is often used by those of Middle Eastern descent.

There really is no right or wrong way to say kefir, as different cultures and communities tend to say it slightly differently. The only distinction that might be made is between milk kefir and water kefir, milk kefir's cousin made from sweetened water.

How it Works

Making milk kefir is extraordinarily simple, but to fully understand the process there is a bit of science we can examine.

The kefir culture, whether from the grains or powdered starter, consists of bacteria and yeasts that interact to create a symbiotic culture. This symbiosis allows the bacteria and yeasts to be fed by and rely upon one another for the perpetuation of their existence.

That is to say, it is their relationship that allows the culture to inoculate the milk and create what we know as milk kefir.

When kefir grains or culture starter are added to milk the bacteria begin feasting on the lactose, or milk sugar, in the milk. This feeding process produces byproducts such as lactic acid, very small amounts of alcohol, and carbon dioxide, and also causes the bacteria and yeast to reproduce and permeate the prepared milk kefir. The milk sugar also nourishes the grains themselves, allowing them to grow and reproduce.

It is important to understand that kefir grains need food to survive, just like all other living things. Their food is milk and the sugar it contains. Once the kefir is done culturing it has consumed all of the food available to it from the milk.

At this point the kefir is best for consumption and the kefir grains are in need of food. If the kefir grains are allowed to remain in the milk past that point, the grains will begin to starve and stress the culture. Straining out the kefir grains and moving them to fresh milk is ideal.

Once you get this cycle down you can create fresh kefir indefinitely, while keeping your kefir grains strong and vital.



Basic Nutritional Information

Many people drink milk kefir simply for the taste. Its tangy, yeasty flavor is quite appealing to those with more traditional food sensibilities. Some have even compared it to a milk champagne.

On the other hand, there are many who are drinking milk kefir for health reasons alone.

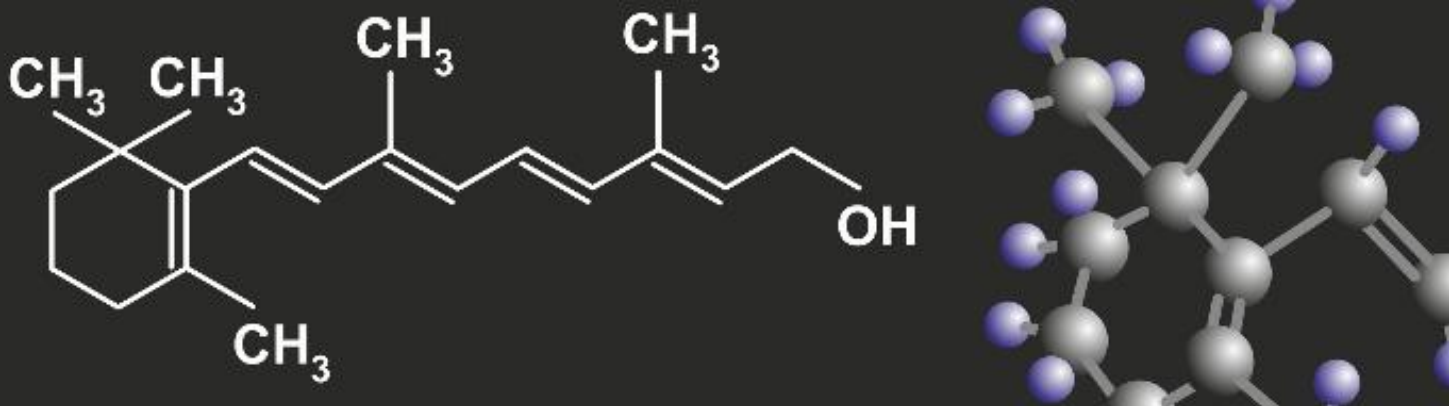
One of the main reasons people looking for a healthy addition to their diet drink milk kefir is because it contains probiotics. Probiotics are the friendly bacteria that exist in our bodies, and in various fermented foods, to help keep our systems running smoothly and keep us healthy and strong.

The full spectrum of bacteria, as well as yeasts, that exist in the kefir culture, and therefore the milk kefir itself, will be listed in detail in the next section. But, as you will see when we discuss the difference between kefir and yogurt, the types of bacteria are both incredibly numerous and incredibly beneficial to the digestive tract.

Milk kefir is also known to contain large amounts of beneficial yeasts. Many people think of yeast as detrimental to the body. But, just as there are friendly and unfriendly bacteria, there are friendly and unfriendly yeasts.

The beneficial yeasts found in milk kefir are just as necessary and beneficial to the body as the friendly bacteria.

Working systematically with the probiotics and yeasts are the enzymes present in milk kefir. Those enzymes are helpful in aiding digestion, as all enzymatic foods help break down the food you are digesting by aiding the acid in the stomach.



Finally, milk kefir is known to be a great source of various vitamins and minerals. Particularly, it is rich in vitamins A, B2, B12, D, and K, as well as calcium, magnesium, and phosphorus. Of course, the quality of the milk you start with will also dictate the nutritional content of the kefir you end up with.

Composition of Milk Kefir Grains: Bacteria & Yeasts

Milk kefir grains are a combination of live bacteria and yeasts that exist in a symbiotic matrix. While a highly complex and variable community of lactic acid bacteria and yeasts can be found in kefir grains, this is a list of the specific set of active bacteria and yeast generally known to comprise milk kefir grains*:

Bacteria

Species *Lactobacillus*

Lb. acidophilus
 Lb. brevis [Possibly now Lb. kefir]
 Lb. casei subsp. casei
 Lb. casei subsp. rhamnosus
 Lb. paracasei subsp. paracasei
 Lb. fermentum
 Lb. cellobiosus
 Lb. delbrueckii subsp. bulgaricus
 Lb. delbrueckii subsp. lactis
 Lb. fructivorans
 Lb. helveticus subsp. lactis
 Lb. hilgardii
 Lb. helveticus
 Lb. kefir
 Lb. kefiranofaciens subsp. kefirgranum
 Lb. kefiranofaciens subsp. kefiranofaciens
 Lb. parakefir
 Lb. plantarum

Species *Streptococcus*

St. thermophilus
 St. paracitrovorus

Species *Lactococcus*

Lc. lactis subsp. lactis
 Lc. lactis subsp. lactis biovar. diacetylactis
 Lc. lactis subsp. cremoris

Species *Enterococcus*

Ent. Durans

Species *Leuconostoc*

Leuc. mesenteroides subsp. cremoris
 Leuc. mesenteroides subsp.
 mesenteroides
 Leuc. dextransicum

Yeasts

Dekkera anomala/*Brettanomyces anomalus*
Kluyveromyces marxianus/*Candida kefir*
Pichia fermentans/*C. firmetaria*
Yarrowia lipolytica/*C. lipolytica*
Debaryomyces hansenii/*C. famata*
Deb. [Schwanniomyces] occidentalis
Issatchenkia orientalis/*C. krusei*
Galactomyces geotrichum/*Geotrichum candidum*
C. friedrichii
C. rancens
C. tenuis

<i>C. humilis</i>	<i>Sacc. humaticus</i>
<i>C. inconspicua</i>	<i>Sacc. unisporus</i>
<i>C. maris</i>	<i>Sacc. exiguus</i>
<i>Cryptococcus humicolus</i>	<i>Sacc. turicensis sp. nov</i>
<i>Kluyveromyces lactis var. lactis</i>	<i>Torulasporea delbrueckii</i>
<i>Kluyv. bulgaricus</i>	<i>Zygosaccharomyces rouxii</i>
<i>Kluyv. lodderae</i>	
<i>Saccharomyces cerevisiae</i>	Acetobacter
<i>Sacc. subsp. torulopsis holmii</i>	<i>Acetobacter aceti</i>
<i>Sacc. pastorianus</i>	<i>Acetobacter rasens</i>

*Please note: this list is for general informational purposes only. We do not test individual batches of milk kefir grains for yeast and bacteria content; therefore we cannot make any guarantees to the exact probiotic makeup any particular set of milk kefir grains sold on our website.



The Difference Between Yogurt and Kefir

Many people assume that because yogurt and kefir are cultured milk products, there isn't much difference between the two. This is not true. There are many differences between yogurt and kefir, including how they are made, the type of bacteria present, and the health benefits of each.

Incubation Type

There are two types of yogurt: mesophilic and thermophilic. Mesophilic means that it is cultured at room temperature. Thermophilic means that the culture requires a specific range of temperatures to incubate.

Kefir is mesophilic, which means it can culture at room temperature. Many yogurt strains, however, are thermophilic and require some sort of warming device to properly culture.

There is also a difference in what is used to propagate the culture in the milk. Yogurt can be made by mixing a bit of a previous yogurt batch into fresh milk. Once the new batch is complete it can be used again for another batch. (Yogurt can also be made with a dried starter.)

Kefir, on the other hand, is made with either a dried starter or a set of kefir grains. These gelatinous grains multiply over time, leaving you with extra grains to use, give away, or compost after every batch. In making kefir, the grains are simply removed from a newly made batch of kefir and added to fresh milk to make the next batch.

Types of Bacteria Present

Yogurt and kefir contain different types of bacteria, each of which perform different tasks.

The beneficial bacteria found in yogurt help keep the digestive tract clean and provide food for the friendly bacteria found in a healthy gut.

The bacteria in kefir, on the other hand, can actually colonize the intestinal tract. Kefir also contains a lot larger range of bacteria. So while yogurt may contain a handful of different strains of bacteria, kefir may contain at least twice that.

This is beneficial in creating a fully fermented, low-lactose cultured milk as well as providing the gut with a good range of bacteria.

Kefir Contains Yeasts

Both kefir and yogurt are lactic acid fermentations. In addition, kefir contains beneficial yeasts that can also produce a slight amount of alcohol.

Texture & Flavor

Yogurt has a flavor that most of us are familiar with: tart, smooth, and creamy. Kefir is also tart, but it can have a touch of yeast or alcohol flavor to it due to the beneficial yeasts present in the culture.

Most varieties of yogurt are also thicker than kefir, given the same length of fermentation. While yogurt is almost always eaten with a spoon, kefir can often be eaten with a straw out of a glass.

After reading all of this you might think that kefir is superior to yogurt and therefore the only cultured dairy you should be eating. The truth, however, is that both yogurt and kefir are beneficial cultured dairy products that can perform different, helpful tasks in the body.

Choosing a Kefir Culture: Grains vs. Powdered Starter

There are two types of cultures available for making kefir. The traditional method is to use kefir grains, which are a naturally occurring organism probably originally from the Caucasus Mountains. Kefir grains don't actually contain any grain such as wheat, rye, etc., but they are referred to as "grains" due to the appearance of the culture. The second type of culture is a powdered kefir starter. This culture is created in a laboratory and is a direct-set variety starter culture, which means it is meant to be used once or maybe a few times before the culture weakens. There are distinct advantages and disadvantages to both types of cultures.

Kefir Grains and Kefir Starter: What They Have in Common



Probiotic Beverage. Both kefir grains and kefir starter can be used with numerous types of milks and other liquids to create a probiotic beverage containing live strains of yeasts and bacteria. While kefir starter can successfully culture almost any type of milk, milk kefir grains can only culture non-dairy milks one or two times before they must be refreshed with dairy milk.

Ease of Use. Both milk kefir grains and kefir starter are quite easy to use, even for someone who is new to making cultured foods.

Bacteria Strains

One way in which kefir grains and kefir starter differ is in the number of strains of beneficial yeast and bacteria available through the starter culture. Generally speaking, kefir starter has 7 to 9 strains of bacteria (and little or no yeast) depending on the particular brand of starter. Milk kefir grains

generally have around 56 strains of yeast and bacteria, making kefir grains the more nutrient-dense method for making kefir.

Reusability

Kefir grains are reusable and with proper care can be used to culture batch after batch of kefir. The kefir grains are simply placed in milk, allowed to culture, then removed and placed in new milk. A small amount of the kefir made with powdered kefir starter can often be reserved and added to fresh milk to make a new batch of kefir. Generally it can be used several times before the bacteria weaken significantly. The number of times powdered kefir starter can be used is dependent on a few factors including the freshness of the milk, hygiene, and how quickly the kefir is reused.

Culture Care



Another way in which kefir grains and kefir starter differ is the way the cultures are cared for. Kefir grains can turn out a new batch of kefir every 12 to 48 hours, but to stay healthy, they must be cared for switched out to new milk regularly, and not allowed to starve. Small batches (1 to 2 cups) can be made if it becomes difficult to keep up with consuming the kefir being made.

Powdered kefir starter is well suited for individuals who do not wish to make kefir regularly. Kefir starter is kept in packets in the refrigerator or freezer and when kefir is desired, a packet of starter is simply added to the milk and allowed to culture. As stated above, kefir starter can often be used a few times before the bacteria weaken significantly.

Cost

While kefir grains are more costly upfront, over time kefir grains are the far more economical option since they are truly reusable and can turn out a new batch of kefir every 18 to 48 hours.

Bottom Line

We generally recommend kefir grains as the most natural, economical, and nutrient-dense way to make kefir. However, it is not always practical to maintain kefir grains on a daily basis, and therefore in situations where it is more practical to make kefir only occasionally, we would recommend opting for the powdered kefir starter.





Using Kefir in Everyday Recipes

You might be wondering what you are going to *do* with all of that milk kefir you are going to be making. We'll get into specific recipes for a variety of savory and sweet dishes later on, but for now let's discuss the versatility of kefir and its various uses in your kitchen.

Kefir, because it contains acids and bacteria much like yogurt and buttermilk, can be used in all sorts of baking recipes with delicious, tangy results. The bonus of using kefir instead of these other cultured dairy products is that if you are already making kefir for things like smoothies or kefir cheese, then you have no need to make or purchase yogurt or buttermilk.

In other words, you can simplify things in the kitchen by using kefir, something you already have, instead of keeping yogurt and buttermilk in the house as well. Imagine: only one culture to keep up with, one ingredient for a multitude of recipes, and one tasty and healthy result.

Here are some recipe ideas for you to get started:

Biscuits. Use [this classic soaked buttermilk biscuit recipe](#) for flaky delicious biscuits, but substitute kefir for the buttermilk.

Pancakes. Try these [apple cinnamon kefir pancakes](#) that already utilize kefir, or try these [gluten-free soaked buckwheat pancakes](#) and use kefir for the soaking medium instead.

Cake. The acidity of cultured dairy products creates a tender, moist, delicious cake. This [cultured dairy chocolate cake](#) will soon become your favorite chocolate kefir cake.

Scones. This slightly sweet cousin to the biscuit can easily be made with kefir instead of milk or buttermilk. Try these [simple scones with kefir](#) or make your favorite recipe with kefir instead of buttermilk.

Banana Bread and Other Quick Breads. Most quick breads like banana, zucchini, or pumpkin utilize some type of acidic cultured milk as an ingredient. This acidity reacts with the baking soda often found in the recipes to create a lovely rise. It also makes for a tender crumb in your loaf. Use kefir in place of yogurt or buttermilk in your favorite quick-bread recipe and be sure to try this [kefir banana bread](#).

Ranch Dip. Instead of the usual buttermilk ranch recipe, try this [kefir ranch dip](#) instead.

Kefir Yeast Bread. This is perhaps one of the most exciting things about kefir. Because kefir contains both bacteria and yeasts, kefir can be used as a yeast leaven in breads much like sourdough. Try this [milk kefir yeast bread](#) and see what you think.

Blended Chilled Soups. There are hosts of chilled and blended soup recipes that involve either yogurt or buttermilk. They are the perfect meal for a hot day, but you can make them even better (and simpler, if you have only kefir) by using kefir in place of the other cultured dairy in the recipe. Try this [chilled cucumber-avocado-kefir soup](#) using kefir during the heat of summer.

So if you wish to keep things simple in your kitchen by keeping only one cultured dairy product on hand, then you may want to start using kefir in place of yogurt and buttermilk in all of your favorite recipes. It will save you time, energy, and space and give you delicious and nutritious benefits as well.

Even More Creative Ways to Use Dairy Kefir

If you're looking for more ideas for adding milk kefir to your dishes then you'll appreciate that milk kefir is really versatile. It can be used for just about anything needing a bit of cultured dairy product, whether it is savory or sweet.



Savory

Salad Dressing. Replace the buttermilk, yogurt, or sour cream in your favorite salad dressing recipes with kefir. Or wing it and try a few different flavor combinations. Add a bit of garlic, cumin, and cayenne for a southwestern flavor. Grate some ginger, garlic, and cilantro and add to kefir for an Asian flare. Or go with everyone’s favorite ranch dressing by adding garlic, parsley, and lemon to your kefir salad dressing.

Spreadable (Cream) Cheese. Like yogurt, kefir can be strained through a coffee filter or cheesecloth over a bowl. The whey will drip into the bowl and the kefir cheese will remain on top. You can flavor this as you would cream cheese for crackers, veggies, or bagels. Add some minced chives, roasted garlic, or even a little lox for that savory cream cheese-like spread.

Vegetable Dip. To make a thick dip either use a kefir that has been allowed to ferment until thick or combine half kefir and half sour cream to use as the base of your vegetable dip. Then mix in your favorite combinations such as the ones mentioned above under salad dressing.



Sweet

Smoothies. The most obvious and most common way that people consume kefir is through smoothies. This often involves blending kefir with fruits like bananas, berries, and avocados to create a yummy treat. You could also try using new combinations like orange + vanilla, coconut + pineapple, or apple + cinnamon.

Popsicles. This frozen treat can be made by sweetening and flavoring your kefir or by making an extra-large batch of smoothies and freezing half in popsicle trays.

Ice Cream. Replace the milk in your homemade ice cream with kefir for a cold, tangy treat! Try this [kefir ice cream recipe](#).

Sweet (Cream) Cheese Spread. If you grew up loving the sugar-filled fruity cream cheeses sold in the store to spread on bagels, then you might want to consider making a healthier kefir version. Simply strain kefir through cheesecloth or a coffee filter over a bowl and use the thickened kefir as a base. Mix with chopped fruit, seasonings like cinnamon or vanilla, and a natural sweetener like raw honey or stevia to taste.

Slightly Sweetened Beverage. If you simply want to enjoy a refreshing glass of kefir with a bit of flavor, try some of these combinations with a touch of sweetener:

- a splash of vanilla extract
- a bit of fruit juice

- cinnamon
- nutmeg and egg yolk (a la egg nog)
- coconut, chocolate, almond, or coffee extracts

Whichever way you choose to consume milk kefir is the right way. And using any of the above ideas will help use up that delicious, nutritious abundance of kefir.



Kefir: The Sustainable Dairying Culture



If you need just one more reason to love milk kefir this may be it. The kefir culture could help you in your pursuit of a more natural, sustainable kitchen.

Sustainability is a buzz word these days, just as green and organic were just years ago. Sustainability can be defined as a way of doing things that does not draw unreasonably on resources.

Perhaps this concept can be applied most clearly in the kitchen. Sustainability depends on the foods you buy, how they are grown, how you source them, how you prepare them, what it takes to produce the food you eat, and what it takes to store it.

The art of culturing food is as nearly as old as food itself, so there is no question that the fermentation of food can aid in sustainability. But with our modern culture there are many choices, in the varieties of food available and in the various ways to culture them.

There is one culture that can help us produce a variety of foods in our kitchens without having to purchase separate cultures or use a lot of time or resources on culturing, and with wonderful and tasty results.

This sustainable culture is milk kefir!

A single purchase of milk kefir grains can produce a lifetime supply of various types of cultured dairy products. And with that one time purchase you could even pass down your kefir grains to your children one day.

Now you're probably wondering "How is milk kefir going to produce my favorite foods like butter and both hard and soft cheeses?"

The answer is simple: start with kefir grains and you can produce the following five cultured dairy foods easily and with little equipment in your home kitchen.

Milk Kefir

How to Make: Making milk kefir is as simple as placing your kefir grains in a quart jar, adding milk, stirring with a wooden spoon, and covering lightly for culturing. Allow to culture for 12 to 24 hours, depending on temperature and flavor preference.

How to Use: Drink as is, use like yogurt in a bowl with fruit and nuts, or blend up as the base for smoothies.

Kefired Sour Cream

How to Make: The process is exactly like making milk kefir, as above, but using cream instead of milk. The result is a tangy, delicious sour cream.

How to Use: Top your favorite tacos, soups, or desserts with this lush cultured dairy product. It can also be used as the base of a rich vegetable dip or salad dressing.

Kefir Butter



How to Make: Use kefir cream from above to make butter. Simply replace the cream you would normally use with kefir cream and beat the cream until the butterfat separates from the buttermilk. Wash and rinse as you would with regular butter.

How to Use: This butter will be rich, nutty, and tangy similar to cultured butter often found in Europe. Because it is cultured it will also have a better keeping quality. Spread on breads, cook eggs in it, or use in your favorite frosting recipes.

Soft Kefir Cheese

How to Make: Place completed milk kefir in a sieve that has been lined with cheesecloth, a coffee filter, or a very clean tea towel. Allow to drain over a bowl for 6 to 12 hours or until it is the texture of cream cheese.

How to Use: This tangy cultured cheese has the consistency of cream cheese and can be used as such. Spread on toast as is. Add chopped herbs and garlic to make a spread or dip. Mix in fruits and honey for a delicious bagel spread. Use in place of mayonnaise in potato salads.

Hard Kefir Cheese

How to Make: Hard kefir cheese is simply a continuation of the soft kefir cheese. Once your soft kefir cheese is ready you will press even more whey out. Wrap the cheese in cheese cloth or a towel and

place it in a colander. Set a plate on top of the cheese and weigh the cheese down using canned foods or something else that is heavy. Start with a minimal amount of weight and continue to increase the weight every few hours until the dripping stops.

How to Use: This is a crumbly cheese that can be grated over your favorite dishes such as soups, salads, sandwiches, pizzas, tortillas, vegetables, and anything else that could use a tangy, creamy pop of flavor.

If you are interested in a healthy, sustainable, “green” kitchen or way of eating at all then get yourself some [kefir grains](#) and spend a lifetime making these various delicious kefir dairy products.

Next Up

Now that you know all about kefir, where it comes from, how it is made, and how you can use it to create all sorts of yummy dishes, it is time to learn how to make it yourself.

Making kefir at home will save you cash and reward you with as much kefir as you can possibly make.

First, though, you’ll need to learn exactly what to do with those kefir grains once you get them. This next chapter will guide you through exactly that, step-by-step.





GETTING STARTED

activate your grains, choose your milk,
& prepare your equipment



Rehydrating Milk Kefir Grains



ur kefir grains are sold in a dehydrated state, which preserves the yeast and bacteria in the culture while allowing the culture to be shelf-stable and therefore safe to ship or sell in a retail location. Our kefir grains can be activated for use through the following rehydration process. This process generally takes 3 to 7 days.

Prepare the Rehydration Solution

Equipment. Click here for more information on [choosing the best brewing container, cover system, utensils, and more.](#)

- One pint- or quart-size glass jar
- A plastic or wood stirring utensil (we do not recommend using metal but if metal must be used, ensure that it is stainless steel)
- A breathable cover for the jar such as a tight-weave towel, paper towel, or paper coffee filter
- A rubber band to secure the cover to the jar
- Optional: A [fine mesh strainer](#) (plastic or stainless steel) for removing the kefir grains from the finished kefir

Ingredients. Click here for more information on [choosing the best milk source for making kefir.](#)

- One packet dehydrated [Milk Kefir Grains](#)
- Fresh cow or goat milk. *Do not use coconut, soy, nut milk, or any alternative varieties of milk. If using pasteurized milk, do not use milk that is close to the “use by” date. Do not use milk that is ultra-pasteurized. If using raw milk, we do not recommend using milk that is more than a few days old due to rising bacteria counts which can compete with bacteria and yeast present in the kefir grains.*

A Note about Hygiene. When working with kefir grains, it is important not to introduce competing bacteria to the process. Be sure to wash and rinse your hands well prior to working with the milk or the kefir grains. Also be sure to thoroughly clean and rinse the

container and all utensils that will come in contact with the kefir grains. Beware soap and food residue the dishwasher may have missed. When in doubt, give everything an extra rinse. The brewing vessel can be cleaned with regular soap and hot water (rinse several times very well) or with vinegar. Never use bleach on any item that will come in contact with the kefir grains.



Activating the Kefir Grains

- Place the dehydrated kefir grains in one cup of fresh milk and leave in a partially sealed container for 24 hours at room temperature.
- Each day, strain the grains from the milk and add the kefir grains to fresh milk. This process should occur even if the milk does not coagulate (kefir). The strained milk can be discarded or used for cooking provided it looks and smells okay.

Choose a Safe Spot. An ideal culturing spot should be relatively warm but not excessively so. Temperatures between 65° and 80°F are ideal. An ideal spot for making kefir should be out of direct sunlight. Indirect light or darkness is neither favorable nor problematic. Be sure the spot has reasonably good airflow as access to oxygen benefits the fermentation process. In addition, be sure the kefir is not fermenting near a garbage or compost bin, bread made with commercial yeast, or any other cultured foods such as kombucha, yogurt, sourdough, sauerkraut, etc. Cross-contamination by stray yeasts and bacteria can be problematic for the kefir grains.

Signs the Rehydration Process is Complete

- Within 4 to 7 days, the 24-hour milk batch will begin to smell sour but clean. At that point, the milk should start to coagulate (kefir) within 24 hours. (Please note: if the area where your kefir grains are kept is cooler than 70°F, it may take 30 to 48 hours to see coagulation.)
- The first few days may yield an overgrowth of yeast or a layer of froth or foam on the surface of the milk. Within 5 to 7 days, the bacterial balance should stabilize and the kefir will begin to smell clean, sour, and possibly of fresh yeast. Under some circumstances, the kefir grains may take 2 to 4 weeks to start making kefir. Please be patient during this process.
- Once the milk is reliably turning into pleasant-tasting and pleasant-smelling kefir within 24 to



48 hours, your kefir grains are ready to generate regular batches of kefir.

Signs of Problems during Rehydration

While problems during rehydration are relatively uncommon, it is important to keep an eye out for these few signs that the process isn't proceeding normally.

Time Frame. If the milk is changed every 24 hours for more than 10 days and the milk is not turning to kefir within 24 hours, allow the milk and kefir grains to sit for an additional 24 hours (48 hours total). Ambient temperature in particular can affect how quickly the kefir forms. If the milk still fails to

coagulate contact Customer Support at Cultures for Health for additional information to determine if the culture is inactive and if a replacement is needed.

Mold. While unusual, mold can and does occasionally develop and can generally be seen by the formation of white, green, orange, red, or black spots, or a pink film on the surface of the milk. If mold does develop, immediately toss the entire batch including the kefir grains. Do not try to salvage a moldy batch or moldy kefir grains (even if there isn't any mold directly on the kefir grains themselves). Doing so may be dangerous to your health. Contact Customer Support for additional assistance.

Pests. Culturing kefir is very attractive to ants and fruit flies, which is why we recommend using a tight-weave cover and securing the cover with a tight rubber band to keep the invaders out. If you find worms (maggots) have infested your batch, this is a sign that fruit flies or house flies have invaded and laid their eggs. If this happens, immediately toss the entire batch including the kefir grains. Do not try to salvage an infested batch or infested kefir grains. Doing so may be dangerous to your health. Contact Customer Support for further assistance.



Choosing Equipment for Making Kefir



If you want to make milk kefir at home, there are a few supplies that you will need to gather, primarily a culturing container and a cover for the container. Beyond that everything else is optional.

Kefir Culturing Containers

Choosing the vessel used to make your kefir is perhaps one of the most important decisions you will make before the process can begin. While a number of options exist, some materials are clearly superior to others.

Glass. Glass is hands-down the best option for brewing kefir. Glass won't react to the acidity of the brew. Unlike plastic, glass doesn't scratch easily (damage to the container can harbor foreign bacteria) nor does it generally contain chemicals such as BPA. Glass containers are also relatively easy and inexpensive to obtain. Good options include canning jars in pint, quart, and half-gallon sizes.

Plastic. Although technically plastic can be used to brew kefir, we do not recommend it for several reasons. First, plastic can be damaged and scratches in the plastic can harbor foreign bacteria. Second, plastic (even food-grade plastic) often contains undesirable chemicals which can be harmful to the kefir grains. In short, using plastic to brew kefir greatly decreases the odds of brewing a safe batch.

Ceramic. Do not use ceramic as most of the glazes used to coat ceramic contain lead.

Porcelain. Food-grade porcelain is generally safe for brewing kefir. Avoid porcelain pieces such as vases or decorative pottery that are not food-grade.

Crystal. Crystal may contain lead. Do not use crystal to brew kefir.

Metal. Metal is generally detrimental to kefir and should not be used as a culturing vessel or for any item that will have contact with the kefir grains. The only possible exception is stainless steel. Because it is relatively inert, some people feel it is a reasonable alternative to glass. While we do not recommend using it, some people do have success doing so.

Besides the material from which the vessel is made, there are several other factors to consider when choosing a container for making kefir.

Size. Kefir can be made in a pint, quart, or half-gallon jar. Generally speaking, if you are starting out with just a teaspoon of kefir grains, we recommend culturing no more than a pint at a time. Once your kefir grains are fully acclimated to their new home, they may be able to make up to a quart at a time. As the kefir grains multiply, it is possible to brew larger batches of a half-gallon or even a gallon at a time. On a practical level, when choosing the size of your culturing container, consider how much kefir you will consume as each batch of kefir will take only 18 to 48 hours to culture. It is better for the health of the kefir grains to continually make small batches than it is to make large batches and then take breaks and keep the grains dormant in the refrigerator.

Lid. While a lid is normally not used during the fermentation process, having a container with a lid to use for storing the kefir after fermentation is complete and the kefir grains have been removed can be quite handy. Alternatively, finished kefir can be transferred to other storage containers.

Covering the Culturing Container

It is important to employ an effective cover system for your kefir culturing vessels. Bugs such as fruit flies as well as transient yeasts and bacteria from the air can easily find their way into your kefir and ruin the whole batch. An effective cover system should not be air-tight but rather allow the mixture to breathe. It will need oxygen during the fermentation process as well as a vent for gas created as a byproduct. A good cover system will also be secure against invaders. Effective coverings include tight-weave dish towels or fabric, multi-layered tight-weave cheese cloth (known as butter muslin), paper towels, paper coffee filters, etc. The cover should then be secured with a tight rubber band to prevent ants and fruit flies from sneaking under. Do not use a tight lid. Doing so will inhibit airflow needed for effective fermentation and also allow gas to build which can make removing the cover adventurous. Avoid using loose-weave fabric or screens that will not keep out tiny bugs or transient yeasts and bacteria.

Other Optional Supplies for Making Dairy Kefir

While only a vessel and covering are required for making kefir, there are several additional items that can be helpful. Please note: it is critically important to the health of the kefir grains that they not come in contact with reactive metal. This includes jewelry such as rings, measuring cups, utensils, strainers, etc. (Stainless steel is fine). Glass, plastic, and wood kitchen items are far safer for the kefir grains. Please keep this in mind when choosing items to use for working with your kefir.

Strainer. Once your kefir has finished culturing, there are several ways to remove the kefir grains so they can be placed in fresh milk. Some people simply use their fingers to fish the kefir grains out. (Be sure your hands are very clean and free of soap residue.) Many people find it is far easier to use a fine-mesh strainer to find the kefir grains. Straining the finished



kefir also has the added benefit of homogenizing the Kefir and breaking up particularly firm coagulated portions. We recommend using a [Plastic Fine-Mesh Strainer](#) for this task.

Choosing Milk for Making Kefir

Once you've got active kefir grains and the proper equipment, it is time to choose the milk you wish to use to make kefir with. You probably already have a type of milk in mind, which is great. But it is good to know the pros and cons of each type of milk and how it will affect the culturing process.

Animal Milk vs. Alternative Milks

Animal Milk. The ideal environment for kefir grains is animal milk, also known as dairy milk. Varieties include cow, goat, sheep, and other similar species. Kefir grains thrive in animal milk due to the chemical makeup of the liquid. The lactose and casein in animal milk provide the most efficient food source for the kefir grains and bacteria, and therefore the most efficient and effective culturing environment.

Alternative Milks. While animal-based milks are the healthiest for the kefir grains, alternative “milks” (coconut, soy, rice, nut, etc.) can also be used under certain conditions. Generally speaking, coconut milk, soy milk, and rice milk can be cultured using kefir grains as long as a revitalization period is observed (see below). While some people report success culturing kefir grains in seed and nut milks (such as hemp milk, almond milk, etc.), these varieties tend to yield more inconsistent results.

Revitalization Period. When using a non-animal milk, it is important to occasionally allow the kefir grains to revitalize in animal milk for 24 hours. We recommend allowing the kefir grains a revitalization period at least once every few batches. To revitalize the kefir grains, simply place them in 1 to 2 cups of dairy milk for 24 hours. Once the process is complete, the kefir grains can be returned to use with an alternative milk.

Fat Content

Milk with any fat content ranging from fat-free to whole milk may be used with kefir grains. While kefir made with reduced-fat milk will have a thinner consistency, the fat content itself does not influence the effectiveness of the kefir grains or the culturing process.

Homogenization

Homogenization is a commercial treatment that prevents the cream from separating from the milk. Both homogenized and non-homogenized varieties of milk can be used with kefir grains. The only difference will be that kefir made with non-homogenized milk will develop a layer of kefir cream on top of the kefir milk. The layer of cream is often a yellowish color in contrast to the white milk.

Pasteurized vs. Raw



Pasteurized Milk. Pasteurized milk is most commonly used for making kefir. We strongly recommend avoiding ultra-high temperature (UHT) or ultra-pasteurized (UP) milk. These sterilization processes actually cook the milk, rendering it far less effective for culturing. Therefore using UHT or UP milk with kefir grains will typically yield inconsistent culturing results.

Raw Milk. Raw milk generally works well with kefir grains. We do recommend using fresh milk whenever possible. Raw milk comes with its own set of beneficial bacteria, and if your

milk is a few days old or wasn't chilled down quickly enough before you bought it, that bacterial count can be high. This means that the bacteria in the milk may provide some competition for the kefir grains making it more difficult to culture the milk properly.

Using Previously Frozen Milk for Culturing



Whenever a food item is produced, whether through bringing ingredients together into a composed dish or using a single-ingredient cultured food, there is one factor that affects the end result above all else: the quality of the ingredients.

This applies just as strongly in the world of cultured products as it does with a fresh vegetable salad: the fresher the ingredients, the better the flavor.

So when it comes to cultured dairy products, the fresher your milk is, the better your end product will be, all other factors being equal. And because so many people who culture their own dairy already know this, they often will seek out locally produced milk and freeze it to keep it as fresh as possible or because they will only have access to it for a season.

The good news is that this is usually fine. The bad news is that freezing will not keep milk forever and it can change some of its properties, which thereby can change the cultured dairy products that are produced from it.

Negative Effects of Freezing

Some alterations of the milk you may find from freezing include:

Separation. Depending on how you went about milking and freezing your milk, you may notice a separation of the fat globules from the rest of the milk in both cow and goat milk.

This is often more pronounced in cow milk as goat milk is naturally homogenized. The separation can be caused by a few factors:

- a natural separation in cow milk due to the time it takes the milk to freeze;
- a weakening of the membrane surrounding the fat globules, which causes an easier separation;
- a freezer with an automatic defrost cycle that causes the milk to thaw and freeze again;
- thawing the milk too rapidly or too slowly, especially cow milk.

Vitamin Loss. The freezing process, like many other food preservation techniques, can lower the vitamin content of the milk. The numbers aren't staggering enough to worry about, but rather a result of the natural degradation of any food product that is simply slowed down by the freezing process.

Off Flavors. All food products that are frozen can develop off flavors. This may be due to contact with other flavors or odors from the foods surrounding your milk, if your container hasn't been sealed properly. This could also occur because of any odors or flavors left in the vessel you froze the milk in. Finally, exposure to air during the process of freezing or moving the milk from jar to jar can cause off flavors.

How This Affects Your Cultured Dairy Products

If any of the above alterations have occurred to your milk then they may pass through into your cultured dairy products. For this reason you may want to consider the following:

- Always taste the thawed milk after it has been frozen to determine whether it will have a negative effect on your end product. If the off flavor is subtle it may go undetected in a strongly flavored ferment like kefir.
- Consider using only fresh milk for cheese making. Cheese making tends to be a more finicky process than making other cultured dairy products. Aged cheeses, in particular, may be affected by any fat separation. You may experience a difficulty in getting your milk to produce curds properly or to age and flavor properly as well with previously frozen milk. For this reason you may want to reserve previously frozen milk for cultured foods like yogurt or kefir.

So while freezing milk can affect the flavor, vitamin content, and texture of the milk, you should be able to use it for some cultured dairy products more successfully than for others.

Next Up

Now you're ready to make homemade milk kefir. What are you waiting for? The next chapter will give you all of the information you need to make kefir today.



HOW TO MAKE MILK KEFIR

get started making homemade kefir today



Now that your kefir grains are activated, your equipment assembled, and your milk chosen, it is time to start making homemade kefir in your very own kitchen. The process is quite simple, though it may vary depending on milk and a few other variables. This section takes you through the process, step-by-step.

First, a Note about Hygiene. When working with kefir, it is important not to introduce competing bacteria to the process. Be sure to wash and rinse your hands well prior to working with the milk. Also be sure to thoroughly clean and rinse the container and all utensils that will come in contact with the milk or the kefir grains. Beware of soap and food residue the dishwasher may have missed. When in doubt, give everything an extra rinse. The culturing container can be cleaned with regular soap and hot water (rinse very well) or with vinegar. Never use bleach on any item that will come in contact with the milk or kefir grains.

The Basic Process

1. Place the kefir grains in the milk. Stir the milk and kefir grains briefly. We recommend using a wooden or plastic utensil. If metal must be used, be sure it is stainless steel and not a reactive variety of metal.
2. Cover the jar with a towel or coffee filter and secure with a rubber band. Alternatively a loose lid may be used. (Be sure the lid isn't air tight.)

Culturing the Kefir

Choose a Safe Spot. An ideal culturing spot should be relatively warm but not excessively so. Temperatures between 65° and 80°F are ideal (see below). The best fermenting spot for kefir is out of direct sunlight. Indirect light or darkness is neither favorable nor problematic. Be sure the kefir is not fermenting near any other cultured foods such as kombucha, yogurt, sourdough, sauerkraut, etc. In addition, do not culture your kefir near a garbage can. Cross-contamination by stray yeasts and bacteria can be problematic for the kefir grains and any other fermented foods you are working with.

Stir Occasionally. While not required, it can be helpful to occasionally stir or gently shake the culturing mixture. Agitation allows the kefir grains access to fresh milk during the process and will generally speed fermentation.

Allow the Kefir to Ferment. Check the Kefir every 6 to 12 hours or so. Unless it is particularly warm in your home, kefir normally takes at least 24 hours to form. The length of the fermentation period is dependent on ambient temperature. Ambient temperatures that are too hot or too cold can disrupt the process: too cold and the process slows down; too hot and fermentation proceeds too quickly, resulting in a less desirable flavor pattern. We recommend choosing a culturing spot with an ambient temperature between 65° and 80°F for ideal results.

Remember: Faster fermentation isn't necessarily better. Kefir that cultures more slowly results in a more desirable taste profile.

How to Know It Worked



The primary sign that the process worked properly is that the milk will thicken and coagulate. Animal milk cultured with kefir grains will initially thicken, then coagulate, and then separate into curds and whey (solid portion with a clear liquid portion). Ideally, kefir should only culture to the point where it thickens or coagulates. Which particular point is best depends on the taste profile you prefer. Some experimentation may be necessary to find the best point at which to stop the process. We do not recommend culturing the kefir to the point where it separates into curds and whey. While it is safe to consume (provided the

kefir has not been sitting longer than 48 hours and it smells, looks, and tastes okay), the taste isn't generally considered pleasant and the acidic level of the kefir can be hard on the kefir grains. If you accidentally allow your kefir to over-culture, the kefir can be used for cooking in place of milk in recipes. Please note: alternative milks such as soy or coconut milk may not thicken significantly during the culturing process.

Normal Variations vs. Signs of Problems

Normal Variations. Each batch of kefir is unique and therefore may not proceed exactly as the previous batch. Some common variations include:

- The batch may culture more or less quickly than a previous batch. This is generally a function of the ratio of milk to kefir grains as well as ambient temperature. Beware of drafts that may decrease the temperature in the place your kefir is sitting.
- The kefir grains may sink or float in the milk. The position of the kefir grains does not influence their effectiveness.

Signs of Potential Problems

Milk Does Not Thicken. If the milk does not thicken after being allowed to culture for 48 hours, discard the milk and place the kefir grains in fresh milk. Do not try to culture kefir grains in the same milk for longer than 48 hours. While the milk and kefir grains have been sitting, the bacteria level in the milk has risen which can make the milk unsafe to consume and can present a considerable level of competition to the bacteria and yeast which comprise the kefir grains. Competing bacteria can cause damage to the kefir grains. Once the kefir grains have been placed in new milk, move the kefir to a new warmer spot (lack of culturing is almost always a temperature issue) and check it every 12 hours to determine at what point the kefir has thickened. If the warmer location does not resolve the issue, it may be that your kefir grains have died. While it is very unusual, it does occasionally happen and the kefir grains will need to be replaced. Please note: alternative milks such as soy and coconut milk may not thicken significantly during the culturing process.

Mold. It is very uncommon to find mold developing on a batch of kefir. However unlikely, mold can and does occasionally develop and can generally be seen by the formation of white, green, orange, red, or black spots, or a pink film on the surface of the kefir. Potential causes of mold include:

- Contamination from soap or food residue in the jar or on the utensils used to prepare the kefir.
- Transient yeasts and bacteria in the air or poor hygiene practices when preparing the kefir.
- Allowing your kefir to ferment too close to a garbage can which can be a source of transient bacteria.
- Allowing your kefir to ferment too close to other fermented foods (yogurt, sourdough, kombucha, sauerkraut, etc.) or rising bread made with commercial baking yeast.
- Mold spores in the air from a humid environment such as a kitchen or bathroom or in the air ducts. (High humidity levels in general can make it more difficult to prevent mold.)

If mold does develop, immediately toss the entire batch including the kefir grains. Do not try to salvage a moldy batch or moldy kefir grains even if you do not see mold on the kefir grains themselves. Doing so may be dangerous to your health. Obtain a new set of kefir grains, clean the jar thoroughly, and try again another day.

Pests. Fermenting kefir is very attractive to ants and fruit flies which is why we recommend using a very tight-weave cover and securing the cover with a tight rubber band to keep the invaders out. If you find worms (maggots) have infested your kefir, this is a sign that fruit flies or house flies have invaded and laid their eggs. If this happens, immediately toss the entire batch including the kefir grains. Do not try to salvage an infested batch or infested kefir grains. Doing so may be dangerous to your health. Obtain a new set of kefir grains, clean the jar thoroughly, and try again another day.

Colorful Kefir Grains. Kefir grains that turn pink, orange, or green may be contaminated. It is best to play it safe and toss colorful kefir grains. Please note: yellow kefir grains are not bad but rather a normal variation.

Safety First! Please note, all of this information is presented as advice only and does not substitute for using good judgment. No matter what ingredients or ratios you choose to use, regardless of whether visible mold is present or not, we implore you to always use your best judgment when making and consuming kefir and never to consume any kefir that looks, tastes, or smells unpleasant.

Harvesting the Kefir



Congratulations! You've brewed your first batch of kefir. Now comes the fun part: harvesting and enjoying your beverage. Prior to harvesting your batch, you will need to prepare a clean jar with fresh milk to transfer the kefir grains into.

Removing the Kefir Grains. There are several ways to remove kefir grains from finished kefir. Some people simply use their fingers. Be sure your hands are very clean before attempting this! Many people find that using a [fine-mesh strainer](#) is more efficient. Simply place the strainer over a bowl or storage container and pour the finished kefir through the strainer. You may need to use your (very clean!) fingers to gently work the kefir through the strainer to locate the kefir grains. Please note: if your kefir has coagulated or separated into curds and whey, it is often helpful to first stir the kefir well to homogenize the liquid prior to pouring it through the strainer.

Flavoring. If desired, kefir can be flavored using flavor extract, fruit, or even flavor syrups. An additional option is to use a secondary fermentation period to infuse the kefir with flavor

and allow the kefir yeast and bacteria to develop further. We will discuss many flavoring and recipe ideas in the remainder of this book.

Storage Tips. Unless a secondary fermentation period is used, kefir should be immediately stored in the refrigerator. While estimates vary, we recommend consuming kefir within two weeks.

How to Make Kefir from a Direct-set Culture

Direct-set Kefir Starter Culture is a great option for people interested in making their own kefir but who do not want to maintain a set of milk kefir grains. The process is much like the process of making kefir from grains, except you do not retrieve or have to manage kefir grains between batches.

Equipment:

- One glass jar (pint, quart, or half-gallon)
- A plastic, wood, or stainless steel stirring utensil
- A breathable cover for the jar such as a tight-weave dish towel or paper coffee filter
- A rubber band to secure the cover



Ingredients:

- Packet of [Direct-set Kefir Starter Culture](#)
- 1 quart milk, coconut milk, coconut water, or fruit juice

Milk Considerations. Pasteurized milk is most commonly used with this culture. Non-homogenized milk can be used if desired. Ultra-high temperature (UHT) and ultra-

pasteurized (UP) milk are less likely to culture effectively. Fresh raw milk will typically culture effectively for the initial batch but is difficult to use again due to bacteria content.

A Note about Hygiene. When working with kefir, it is important not to introduce competing bacteria to the process. Be sure to wash and rinse your hands well prior to working with the milk. Also be sure to thoroughly clean and rinse the container and all utensils that will come in contact with the milk or the starter culture. Beware soap and food residue the dishwasher may have missed. When in doubt, give everything an extra rinse. The culturing container can be cleaned with regular soap and hot water (rinse very well) or with vinegar. Never use bleach on any item that will come in contact with the milk or starter culture.

How to Make Kefir

- Heat the milk or coconut milk to 85° to 92°F.
- Mix in the starter culture. Be sure to fully incorporate the culture into the liquid.
- Cover the container with a loose lid and allow the mixture to ferment at 65° to 80°F:
 - Ferment for 18 to 24 hours for dairy milk
 - Ferment for 18 to 36 hours for coconut milk
 - Ferment for 24 to 48 hours for coconut water or fruit juice
- Once the fermentation period is complete, shake the kefir vigorously, place a lid on the container, and store the kefir in the refrigerator.

Choose a Safe Spot. An ideal culturing spot should be relatively warm but not excessively so. Temperatures between 65° and 80°F are ideal. The best fermenting spot for kefir is out of direct sunlight. Indirect light or darkness is neither favorable nor problematic. Be sure the kefir is not fermenting near any other cultured foods such as kombucha, yogurt, sourdough, sauerkraut, etc. In addition, do not culture your kefir near a garbage can. Cross-contamination from stray yeasts and bacteria can be problematic for the kefir and any other fermented foods you are working with.

Signs the Kefir is Done Culturing

Cow or Goat Milk. The culturing process is complete when the milk thickens to the consistency of commercial cultured buttermilk. It will be a pourable liquid and not an “eat with a spoon” level of thickness. The milk will also take on a distinctive sour fragrance.

Coconut Milk. The coconut milk takes on a distinctive sour, less sweet fragrance. Cultured coconut milk does not thicken reliably like animal milk.

Reculturing the Kefir

Kefir made with a direct-set starter culture can often be recultured (reused) anywhere from 2 to 7 times. The exact number of successive reculturings will depend on the freshness of the kefir and hygienic practices employed. We recommend reculturing kefir within 7 days of making each batch. Longer periods between batches will decrease the likelihood the new batch will culture successfully. Please note: reculturing is less likely to be effective if raw milk is used due to the bacteria content of the raw milk. If you prefer to use raw milk, we would strongly recommend using milk kefir grains to make your kefir.

- Reserve 1/4 cup of kefir from a previous batch.
- Thoroughly incorporate the 1/4 cup of reserved kefir into a quart of fresh milk.
- Cover the container with a loose lid and allow the mixture to ferment at 65° to 80°F:
 - Ferment for 18 to 24 hours for animal milk
 - Ferment for 18 to 36 hours for coconut milk
 - Ferment for 24 to 48 hours for coconut water and fruit juice
- Once the fermentation period is complete, shake the kefir vigorously, place a lid on the container, and store the kefir in the refrigerator.

Raw Milk Kefir



Raw milk kefir is a favorite of real-food fans. It combines the fresh enzymatic activity of raw milk with the probiotic powerhouse of kefir.

Many people are looking for ways to eat more raw food. Big salads, raw fruits and vegetables, and raw nuts and seeds are all the rage in the raw-food world. These foods are great because of the enzymes and vitamins and minerals that are left intact when the food is not heated.

In milk that has not been pasteurized, the beneficial bacteria and enzymes naturally present in the milk remain intact. For those who have been introduced to the wonders of raw milk, it comes as no surprise that raw milk kefir is quite delicious, and easy to make as well.

Making raw milk kefir is also incredibly easy. There is no need to keep a separate starter made from pasteurized milk as you would with raw milk yogurt. The milk kefir grains, a gelatinous living substance, are used to culture the raw milk into kefir.

Ingredients & Equipment

- Raw milk
- Kefir grains
- Jar

- Loose-fitting or breathable lid or cover
- Spoon
- Strainer or fingers

Directions

1. Place your kefir grains in the jar. Add milk. Stir gently with a wooden spoon, cover loosely, and leave at room temperature to culture for 12 to 36 hours, depending on the temperature.
2. A shorter fermentation time will mean a lighter flavored kefir; a longer fermentation will mean a more strongly flavored kefir.
3. Once the kefir is done culturing, either strain out the grains or fish them out with your fingers. Store the kefir in the refrigerator and begin another batch with the kefir grains.

For even more detailed instructions, see the previous section on making kefir from kefir grains.

Raw milk kefir can also be made with a culture starter. The benefits of a culture starter are that you do not have to worry about perpetuating the culture, and some people find it more reliable. The downside is that you will have to continue to purchase culture starter. See previous instructions on how to make kefir using a direct-set culture.

Goat Milk Kefir



While cow milk is most prevalent in our western society, goat milk is quite commonly consumed in other cultures. Many who have had a hard time drinking cow's milk are now finding that the lower levels of casein in goat milk make it easier to digest.

Making kefir with goat milk can make it even more digestible since the kefir cultures eat up the lactose present and provide extra enzymes for digestibility. (This may or may not be true for any particular individual. If you have questions, consult with your own health care provider regarding the advisability of drinking goat milk kefir.)

Why Some Choose Goat Milk over Cow Milk

What might be the advantages of using goat milk instead of cow milk to make kefir? Here are a few:

- Goat milk contains less casein than cow's milk, which can make it easier to digest for some people.
- Goat milk is naturally homogenized, meaning the cream will not separate during the kefir process.
- Goat milk's proteins break up into smaller particles than those in cow milk when introduced to your stomach acid. This is another reason it can be easier to digest.

- Goat milk may be more accessible. While it is sometimes difficult to find goat milk in stores, it may be possible for someone to keep a milking goat at home, rather than a cow, due to the substantial size difference.

Is There a Difference in Procedure?

Making goat milk kefir is not much different in practice than making cow milk kefir.

Kefir Grains. Because kefir grains depend a lot upon the environment, goat milk kefir and cow milk kefir are made exactly the same way. What may differ is the kefiring time and the consistency of the end result. Experiment with the amount of time you allow the kefir to ferment to find the tartness and consistency you prefer.

Powdered Kefir Culture. To make kefir with Cultures for Health powdered kefir culture, use it the same way you would with cow milk. With some powdered cultures, instructions recommend using only 1 pint of goat milk for the initial batch, although you can use more for subsequent batches that you reculture.

How to Make Goat Kefir

Using Kefir Grains

Place your kefir grains in a quart jar. Cover with milk, stir with a wooden utensil, and place a loosely-fitting lid on top. Allow to culture in a warm place (65° to 80°F) for 12 to 24 hours, or until desired thickness and flavor are achieved.

Strain milk through a plastic strainer and retrieve kefir grains. Refrigerate kefir and use kefir grains to make a new batch of kefir.

Using Direct-set Culture

Place culture into amount of milk specified in the instructions. Stir with a wooden spoon and culture in a warm place (65° to 80°F) for 12 to 24 hours, or until desired thickness and flavor are achieved.

Reserve an amount necessary for your next batch and enjoy your kefir.

So, if you are a lover of goat milk and would like to make kefir, then by all means use goat milk. The procedure is the same, the flavor will be as good as your milk is, and you can enjoy dairy kefir using your delicious goat milk.

Dairy-free Kefir Options



Milk kefir can be a blessing and a curse for someone with a severe dairy intolerance. While much of the lactose can be eliminated through the fermentation process, those with a strong intolerance to dairy, or those who simply wish to avoid animal products, may wish to forego kefir all together.

The good news is there are dairy-free kefir options.

Coconut Milk Kefir

One very healthful and popular option is coconut milk kefir. This is simply coconut milk that has been cultured by kefir grains or the kefir culture starter. It is thick, tangy, coconut-flavored cultured milk.

Either milk kefir grains or the culture starter can be used to make coconut milk kefir. Either option may be problematic for those with a dairy intolerance because both involve some dairy component. There is very little dairy left in the cultured coconut milk kefir, but those with severe milk intolerances should consult with a health care practitioner regarding the advisability of using these products.

It is recommended that you return the kefir grains to cow or goat milk periodically in order to refresh them and ensure healthy kefir grains.

See the detailed tutorial on making coconut milk kefir in the next section for specific instructions.

Another option for making coconut milk kefir is to use water kefir (see below) to culture the coconut milk. You would make water kefir according to instructions, then add 1/4 cup of the water kefir to 2 to 3 cups of coconut milk, and let it culture for 12 to 24 hours. This will give you a completely dairy-free coconut milk kefir.

Coconut Water Kefir

Coconut water kefir is another good option for those who wish to avoid all traces of dairy. Coconut water is popular as a natural, powerful electrolyte drink and a great hydration product. It contains a wide array of vital minerals.

Coconut water for making kefir can be retrieved from young coconuts, or you can pasteurize coconut water found in health food stores.

You may use either milk kefir grains, water kefir grains (see below), or kefir culture starter for making coconut water kefir. Using water kefir grains would ensure that there is no trace of dairy as there may be in milk kefir grains or milk kefir culture starter.

Water Kefir



Water kefir is another dairy-free kefir product. When made properly, it is delightfully carbonated and can be a great low-sugar, fermented alternative to soda pop.

The process is much the same as dairy kefir, but instead of milk, sweetened water is used. Water kefir grains will also multiply much like milk kefir grains so they can be re-used or shared with friends.

Water kefir is fairly versatile in that you can kefir sweetened water, fruit juices, or coconut water. This makes water kefir a great option for those looking for a variety of flavors in their fermented beverages.

So if you are interested in the wonders of the “good feeling” kefir can provide but must avoid dairy, we recommend that you try the above three options.

How to Make Coconut Milk Kefir



For those who are dairy-intolerant, there are ways to consume kefir made from non-dairy milk. Coconut milk is one fabulous option, recommended by many for those who cannot have dairy.

Making coconut milk kefir is similar to making cow or goat milk kefir, but there are just a few small differences.

Ingredients:

- Milk kefir grains
- Coconut milk: Fresh homemade, canned, or boxed coconut milk. We recommend avoiding brands with additives and sweeteners as they can be hard on the kefir grains. (Guar gum, a common additive, does not seem to be problematic.)

Instructions:

To make coconut kefir, just place the milk kefir grains in coconut milk, give the coconut milk a quick stir with a non-metal spoon, cover loosely (a towel works great), and allow the coconut kefir to culture on the counter for 12 to 24 hours. After 12 hours, check the coconut kefir every few hours (as possible) so you can remove the kefir grains once the coconut kefir reaches the desired consistency. If your home is on the cool side, it can take a few hours longer for the milk kefir to culture.

Sometimes kefir grains will require an adjustment period so the first batch of coconut milk kefir may not culture as desired. Simply use the non-kefired coconut milk for cooking and place the kefir grains in new coconut milk. An adjustment period isn't uncommon whenever kefir grains are switched from one type of milk to another (cow to goat, pasteurized to raw, dairy to coconut, etc.).

Milk kefir grains can be cultured in coconut milk regularly but should be allowed to culture in cow or goat milk for 24 hours once every few batches to revitalize.

Dairy-free Option: While using milk kefir grains is an effective way to make coconut milk kefir, there is a truly dairy-free option for those who choose not to use milk kefir grains. Add 1/4 cup water kefir (finished kefir, not the water kefir grains) to 2 to 3 cups of coconut milk. Cover loosely and allow to culture for 12 to 24 hours.

Ideas for Using Coconut Milk Kefir:

- In place of sour cream in a recipe or as topping to your favorite recipe
- In your coffee
- Sweetened and added as a topping to fruit or your favorite dessert
- As a base for your favorite smoothie
- As a base for making coconut milk ice cream
- In almost any recipe calling for yogurt, kefir, or buttermilk (will add a coconut flavor though); may need to thin out the kefir with a bit of water
- As a treat to eat with a spoon like yogurt (particularly when cold, coconut milk kefir can be quite thick)

Reducing the Lactose Content of Kefir

Many people want to keep their lactose consumption to a minimum or avoid it all together, for reasons of intolerance, or to reduce sugars. How does this relate to kefir, and how can you control the lactose content?



What is Lactose?

Lactose is the disaccharide sugar found in milk. It makes up about 2 to 8% of the volume of milk and is chemically known as $C_{12}H_{22}O_{11}$.

Lactose is known to be allergenic for many individuals. Some people are completely dairy intolerant, being unable to consume either the milk sugar lactose or the milk protein casein. Others are simply lactose intolerant.

Lactose, like all sugars, is a carbohydrate. Anyone who is interested in lowering their carbohydrate content would therefore be concerned with the lactose content of various milk and cultured milk products.

Lactose in Kefir

All cultures (kefir grains, kombucha scobys, etc.) consume sugars in order to produce the favorable microorganisms found in the cultured foods that we love like yogurt and kefir. The lactose found in milk is the primary food supply for dairy cultures.

Since the lactose is consumed during fermentation, any cultured dairy product is lower in lactose than the milk it started as. The cultures have feasted on a fair amount of the lactose in the milk and converted it into the tangy lactic acid we find in kefir or yogurt.

This is great news for anyone looking to avoid lactose and the reason that so many people seem to digest cultured dairy more easily than unfermented milk.

How to Lower the Lactose Content of Kefir

The lactose content of your kefir is determined by three things:

- The lactose content of the milk you started with,
- The amount of time that your kefir is cultured,
- What you do with your kefir after it has cultured.

By manipulating these three factors you can control the lactose content of your kefir to some degree. So let's explore how to use these factors to get the lowest possible lactose content in your kefir.

Type of Milk. There are many options when choosing the type of milk to make kefir from. The two major variables are the animal from which the milk came from and the fat content of the milk itself.

Cow milk is thought to contain a lot of lactose. While this is true, it is not significantly more lactose-containing than the milk of other animals like goats or sheep. The lactose content of milk from any of these animals can vary. Cow milk, goat milk, and sheep milk contain between 4% and 5% lactose, which is not a very big variance.

Choosing goat or sheep milk over cow milk will not result in a big difference in lactose content.

Kefir Culturing Time

When milk is fermented into kefir the culture feasts off of the lactose content of the milk and converts it into all sorts of microorganisms like probiotics and acids. One of the best

indications of how much lactose is in your cultured kefir is the amount of acids in the end product.

As the kefir culture consumes the lactose, it produces acids that give kefir its signature tang. The more time it is given to culture, the more lactose it consumes and the more acids it produces. More acids present in the kefir equate to a tangier kefir.

You can conclude, therefore, that a tangier kefir will be lower in lactose while a sweeter kefir will be higher in lactose.

For those who wish to make a lower-lactose kefir, a culturing time of 24 to 48 hours in a temperature of 65° to 80°F is recommended.

Maturing Kefir Once It Is Cultured

Once you have cultured your kefir for at least 24 hours as recommended above you can take one final step to ensure that the lactose content in kefir is as low as possible. This step is called maturing or ripening.

Remember that kefir was originally made in the Caucasus by those who did not have access to refrigeration. Because of this kefir could not be cultured and then refrigerated. It had to be stored, instead, in temperatures as cool as possible, or consumed immediately.

It is likely that often kefir was allowed to ripen for some time before being consumed. Here is how to replicate this ripening process in your home kitchen:

1. Take freshly cultured kefir (after the grains are strained out) and pour into a clean, sealable glass container. Fill container only 3/4 of the way full.
2. Place a lid on the container, but do not seal it airtight as a fair amount of carbonation can build up.
3. Once or twice every day tighten the lid on the kefir container and shake vigorously. This prevents yeasts and vinegar bacteria from forming a colony on the surface of the kefir. These colonies may form a fuzzy layer on the top of your kefir if the kefir is not well-shaken once or twice per day. Once you have agitated the kefir, loosen the lid again so that it is not airtight.

4. Kefir can be kept for up to 5 days at room temperature in a warm climate and up to 14 days at room temperature in cooler climates.
5. Tighten lid and refrigerate, then consume as needed.

Of course, if you are highly sensitive to lactose then you will want to be very cautious as you determine at what state of “kefiring” you can consume your kefir. Many who struggle with lactose have been able to consume kefir, though, so you may want to give it a try.



BITS AND BOBS

little tips for maintaining kefir in your kitchen



How to Take a Break from Making Kefir

A

lthough kefir grains (both milk kefir and water kefir) can be used to make back-to-back batches of kefir, at some point you may want to take a break from making kefir.

Cooler temperatures greatly slow the culturing process, so the refrigerator is quite useful for taking a break from making kefir. Simply add milk kefir grains to fresh milk, cover the container with a lid, and place the container in the refrigerator. The kefir grains should be safe and healthy for up to a few weeks.

If you require a longer period than a few weeks, we recommend drying the kefir grains. Rinse them thoroughly with filtered water then lay them on a piece of unbleached parchment paper in a safe location, away from dust and insects. Allow the kefir grains to dry at room temperature. This can take 3 to 5 days or longer, depending on humidity and room temperature. Once the kefir grains are fully dried, they can be stored in a cool dry location (the refrigerator is best) for at least 6 months. It is generally helpful to store dried milk kefir grains in a small amount of powdered milk as it is healthier for the kefir grains and helps keep them from rubbing together.

Encouraging Milk Kefir Grains to Multiply

If you've started making milk kefir then you know that the grains involved in the process are a bit of a miraculous thing. These tiny little gelatinous things contain yeasts and bacteria and convert milk into the "feel good" beverage kefir.

What's especially great is that your milk kefir grains may multiply. There is no guarantee that they will, and even if they don't they are perfectly viable and will continue to make delicious kefir.

But, if you are looking to multiply your kefir grains in order to share with friends, then there are a few things you can do to encourage growth and reproduction. Giving them everything they need while protecting them from stress is a must if you want growth.



Give Them an Optimal Temperature

All culture starters thrive in a consistent temperature. Too cold and they slow way down, too warm and they speed way up which can put strain on the culture. Room temperature is ideal for kefir grains and keeping the temperature between 65° and 80°F is ideal. Also, try to keep them in a draft-free space away from windows and doors.

Feed Them What They Need

Milk kefir grains, like all living organisms, need nourishment. The proper food will feed them and encourage growth. Milk kefir grains will thrive on either goat or cow milk. Some people find that the grains prefer raw milk over pasteurized.

Feed Them Frequently

As kefir grains turn milk into kefir they are consuming the lactose and other elements in the milk. After a period of time, 24 to 48 hours, they run out of food as the milk becomes kefir. If you don't feed them you can put strain on them and eventually they can starve and die. So giving them a consistent food supply by straining the grains off and feeding them every 24 hours is imperative.

Keep the Grains Smaller

Just as the grains need the proper food they also need to be able to take in those nutrients. In order to encourage the grains to take up the most nutrients from the milk, try to keep the grains on the smaller side. This may mean gently breaking them up if they are larger to begin with or pulling apart attached grains.

Straining Kefir: Thick Kefir and Kefir Whey

How to Strain Kefir

What You Will Need:

- Milk kefir
- [Butter Muslin](#) (tight-weave cheese cloth), [cotton bag](#) or tight-weave dish towel

Pour the milk kefir into the cheesecloth, cotton bag, or tight-weave towel. Hang above a bowl or jar and allow the whey to drain off for 2 to 4 hours depending on the thickness desired (generally the consistency of yogurt). Once the kefir has reached the desired consistency, place it in the refrigerator. Strained kefir can then be used in place of yogurt or even sour cream depending on the final texture. Straining the kefir further will yield a soft, firm, or hard type of cheese.

- [Soft Kefir Cheese](#)
- [Kefir Cream Cheese](#)
- [Hard Kefir Cheese](#)

Note: The whey strained from the kefir can be used for soaking grains or inoculating fermented vegetables, fruits, or condiments. Whey can also be used in place of water in many recipes and will generally keep for up to 6 months in the fridge.

Ways to Use Whey

Many people think of whey as something to throw out, when in reality it is a superb ingredient (or food) in its own right.

Whey is the acidic by-product of naturally soured or cultured milk. There are several sources of whey that are easily achieved in the home kitchen:

- Let raw milk sour and clabber. Strain using cheesecloth or a clean towel. Please note: this only works with raw milk; do not try this method with pasteurized milk.
- Strain cultured yogurt using cheesecloth or a clean towel.

- Strain cultured kefir using cheesecloth or a clean towel.
- Strain cultured buttermilk using cheesecloth or a clean towel.

In all of these instances you will have a liquid that drains into a bowl. It is usually an opaque yellow. This is fresh whey. It can be stored for months in a refrigerator and used for many things. The health benefits of whey are many as it contains proteins, vitamins, minerals, and small amounts of carbohydrates (if there is lactose remaining after the culturing process).

Whey was once considered a food in its own right, with historical accounts in which people refer to drinking, cooking, or baking with whey. Here are a few ideas for using whey:

Use whey as a culture starter. The whey found in cultured foods like yogurt and kefir contain the active bacteria in these foods. You can use a small amount of whey as a culture starter in vegetables, cultured beverages, and a host of other fermented foods.

Use whey to soak grains. If you are soaking whole grains like oatmeal or rice in order to reduce the anti-nutrients then you might want to consider adding a bit of whey. The acidity of the whey helps to break down hard-to-digest grains and introduces beneficial organisms that will help to make the grains easier to digest.

Use whey in baked goods. Many refer to whey as a “dough conditioner” in baked goods. That means that in baking breads or pastries the whey can create a better-textured final product. This is especially helpful in baking with whole-grain flours. Simply replace the water or milk product in your baked goods with whey.

Use whey in smoothies. You can replace the liquid in your smoothies with whey for a tangy, fortifying treat.

Use whey on the skin and hair. Some folks claim that whey has excellent toning qualities for the skin and hair. This makes sense in that whey contains cultured acids, vitamins, and minerals. You could try some on a cotton ball and apply to your face as a toning agent.

Whey can be added to pet food or animal food. Dogs, cats, and even chickens may enjoy the extra flavor of whey added to their regular feed!

So there's no need to throw that whey away. It is an excellent food and preservation agent that has been prized over the centuries for its nutritive qualities.

Flavoring Milk Kefir



When people first try milk kefir it is often met with distaste. After all, the most prevalent cultured milk product available in stores is usually a sugary, fruity, mildly tart yogurt. Kefir is just a little different.

Because it contains yeasts as well as bacteria (yogurt only sports the latter), milk kefir tends to surprise people by its tart, yeasty flavor. And while some choke it down as-is because they love how they feel when they drink it, not everyone is a fan of the stronger flavor.

Many cultured foods, especially beverages, get a second ferment. People often add fruit or juice to kombucha or water kefir after straining off the starter cultures. This can also mellow the sharper flavor of the beverages that is characteristic after the first fermentation.

What is a Second Fermentation?

The first fermentation takes place when you add your milk kefir grains to milk and allow it to culture for 12 to 24 hours. You then strain off the grains, add them to new milk, and are left with milk kefir.

Since you have removed the culture (the grains) you can now play with the milk kefir without risking harm to the original culture. The second fermentation is when fresh milk kefir is cultured for another period of 12 to 24 hours with possible flavoring additions.

To achieve a second fermentation, pour the fresh kefir into a sealable jar, add whatever flavorful additions you wish, and allow to culture for another 12 to 24 hours before refrigerating.

What are the Flavor Benefits of a Second Fermentation?

Some people perform a second fermentation on their milk kefir for the health benefits. Others do it for the improvement in flavor.

Fermenting the kefir a second time, regardless of the additions, mellows the kefir and takes away some of the sharp flavor milk kefir is known for. Not only that, but with the addition of other flavorings, you can spice, sweeten, or flavor that kefir even more.

What are the Other Benefits of a Second Fermentation?

The nutritional quality of kefir is enhanced when a second fermentation is performed. The probiotics continue to multiply, there is an increase in the level of B vitamins, and the calcium and magnesium are said to become more bio-available.

What Flavor Additions Can I Make in the Second Fermentation?

The sky is the limit on flavor opportunities! Because the kefir grains are removed before the second fermentation there is no risk of contaminating or harming your kefir grains in any ways.

Here are some ideas:

- Citrus fruit peels
- Vanilla + cinnamon
- Cocoa powder
- Garlic or onion (for use in savory kefir dip)
- Pumpkin pie spice
- Chopped fruit

When choosing a flavoring for your second fermentation keep two things in mind:

1. Unless you are using ground spices or cocoa powders, be sure the flavoring agent is something you can easily remove from the kefir when the second fermentation period is up.
2. If you are using something that contains sugars, like fruit, the kefir may become more carbonated. You may want to wait until after the kefir has been fermented a second time to add any sweeteners.

Have fun and experiment and enjoy an easier and tastier kefir-drinking experience.



Troubleshooting & FAQ

General

Q. What is kefir?

A. Kefir is a probiotic beverage made with either kefir grains or a powdered kefir starter culture. There are two types of grains, milk kefir grains and water kefir grains. Milk (dairy) kefir grains can be used with cow milk, goat milk, or coconut milk. Water kefir grains can be used with sugar water, juice, or coconut water. Kefir grains consist of bacteria and yeast existing in a symbiotic relationship. The term "kefir grains" describes the look of the culture only. Kefir grains contain no actual "grains" such as wheat, rye, etc. Cultures for Health water kefir grains are grown in filtered water and organic sugar. Our milk kefir grains are grown using only organic milk.

Q. What ingredients go into creating milk kefir grains?

A. Our milk kefir grains are grown using only organic milk.

Q. Does milk kefir have the same benefits as water kefir?

A. Generally speaking water kefir is slightly less concentrated than milk kefir and therefore some individuals find they consume more water kefir than they would milk kefir. However, due to water kefir's water (rather than dairy) base and great taste when flavored, it is easy to consume larger amounts of water kefir.

Q. What strains of yeast and bacteria does kefir contain?

A. How many strains are present in the kefir depends on a number of factors including the type of culture used. For example, milk kefir made with a powdered kefir starter culture generally will contain 7 to 9 strains of active yeast and bacteria. (See the individual product descriptions for the yeast and

bacteria in the different brands of kefir starter.) Milk kefir grains generally contain a larger number of both live bacteria and yeast (more than 50 strains). Click here for more [information on the numerous strains of yeast and bacteria that are generally known to comprise kefir made with milk kefir grains.](#)

Q. I want to consume kefir but I'm allergic to dairy. What can I do?

A. You might try water kefir. Water kefir contains no dairy and is grown in filtered water and organic sugar.

Q. Does milk kefir contain gluten?

A. No, milk kefir grains are grown in organic milk.

Q. Are milk kefir grains reusable? Is the powdered kefir starter culture reusable?

A. Yes, milk kefir grains are reusable. Once a batch of milk kefir has finished culturing, simply remove the kefir grains and place them in fresh milk. The powdered kefir starter culture is also reusable several times. Simply reserve a small portion of your batch of kefir and add it to fresh milk to culture the next batch (see instructions on packet).

Q. How long do dairy kefir grains last? How long does the powdered kefir starter culture last?

A. If cared for properly, milk kefir grains have an unlimited life span and can be used repeatedly to make kefir. Powdered kefir starter culture can be used a number of times but the exact number is dependent on several factors including personal hygiene, cleanliness of the container and utensils (soap is detrimental to kefir culture), etc.

Q. What is the process to make milk kefir?

A. The kefir grains or powdered starter culture are placed in milk and allowed to culture for a period of time on the counter (preferably at room temperature). Once the milk has turned to kefir, remove the kefir grains and place them in fresh milk. In the case of powdered starter culture, you will retain a small amount of the kefir to use as a starter culture for the next batch. (Kefir made with powdered starter can only be recultured a limited number of times.)

Q. How long does it take to make kefir?

A. Kefir generally takes 12 to 48 hours to form. The exact amount of time will vary depending on environmental factors, the most important of which is temperature. Cold slows the fermentation process so kefir will form more slowly in a cold area (and can be all but stopped by placing the grains in milk in the refrigerator). Heat speeds the process so kefir will form more quickly in a warm area and will be more likely to over-culture. We recommend standard room temperature whenever possible. Allowing the kefir grains to remain in milk longer than 48 hours risks starving the kefir grains and potentially damaging them.

Q. If my house is colder than 68°F, will it take longer for the milk to kefir?

A. Yes, cold slows the fermentation process so it will take longer to make kefir. Alternatively, if your home is warmer than standard room temperature, the process will take less time.

Q. Do I need to stir the kefir during the culturing process?

A. You can stir the kefir while it's culturing but it is not necessary.

Q. How will I know if I've successfully made kefir? How do I know if I shouldn't drink it?

A. When milk turns to kefir it thickens. We always recommend that you refrain from consuming anything that looks, smells, or tastes unpleasant.

Q. What does kefir taste like?

A. The taste of finished kefir varies greatly based on the type of milk used (cow versus goat for example) and the length of time it is allowed to culture. Generally speaking, milk kefir has a sour taste and an effervescent texture. If you have not tried kefir before, we would recommend purchasing kefir at the grocery store to try before purchasing a starter culture. (It's generally located next to the milk and yogurt.)

Q. How long can I store the kefir in the refrigerator?

A. This is dependent on a number of factors including how cold your refrigerator is and whether you use raw or pasteurized milk. (Raw milk kefir will last longer.) We always recommend that you do not consume anything that looks, tastes, or smells unpleasant.

Q. Do I need to rinse the grains off between batches?

A. No. There is no need to rinse the grains unless they stop making kefir effectively (which can sometimes be attributed to a buildup of yeast on the grains). If it becomes necessary to rinse the grains, use filtered water if possible to avoid chemical exposure.

Q. Do I need to make a full quart of kefir each time or can I make smaller batches?

A. Making a full quart is not required. Many of our customers find that making one pint at a time better meets their needs.

Q. Do I need to wash the jar/container between batches of kefir?

A. We recommend using a clean container for each batch of kefir.

Q. Why should I make my own milk kefir?

A. In the case of milk kefir grains, homemade kefir will contain a larger number of probiotics than will commercial kefir (which is made with a powdered starter culture). Regardless of whether you use kefir grains or a powdered starter culture, making your own kefir costs significantly less than commercial kefir and you have complete control over the milk you use (organic, non-homogenized, raw, reduced-fat, etc.).

Q. How can I flavor my kefir?

A. Kefir can be blended with fresh or frozen fruit after the culturing process is complete. Be sure to remove the kefir grains or a portion of the kefir (if using a powdered starter culture) before adding fruit.

Q. How can I use my kefir?

A. Milk kefir can be used in a variety of ways. It can be consumed as a beverage (either plain or flavored with fruit). It can be added to smoothies. It can even be strained (using cheesecloth or a yogurt cheese maker) to make kefir cheese. Just mix with some herbs and spread on crackers, bread, etc. Delicious!

Q. What is the difference between kefir grains and powdered kefir starter culture?

A. There are three primary differences between milk kefir grains and powdered milk kefir starter:

- Kefir grains have a larger number of probiotics than the powdered starter culture.
 - With proper care, kefir grains can be used for many years to make kefir. Powdered starter culture can be reused for a number of batches. (A small amount of each batch is used to culture the next batch.) Exactly how many batches is dependent on a number of factors (personal hygiene, cross contamination, container and utensil cleanliness, etc.).
 - Powdered kefir starter culture has a smaller initial investment cost than kefir grains.
-

Q. Can the milk kefir grains (aka dairy kefir grains) be cultured in goat milk or coconut milk?

A. We have many customers who have reported excellent results using our milk kefir grains to make goat milk kefir and coconut kefir.

Q. Can I use UHT / UP (ultra-high temperature or ultra-pasteurized) milk to make kefir?

A. We do not recommend using UHT or UP milk with any of our starter cultures (including yogurt, buttermilk, kefir, or cheese starters). The process by which UHT milk is pasteurized leaves the milk essentially dead for purposes of culturing and therefore you are likely to have less than satisfactory results when using it to make cultured foods.

Q. Can I use non-homogenized milk to make kefir?

A. Yes. Non-homogenized milk makes wonderful kefir. The only difference you will see when making kefir with non-homogenized milk is that the cream will rise to the top of the kefir just like it does with the milk so the top layer of the kefir will be more yellow in color.

Q. Can milk kefir grains be used with raw milk?

A. Yes, milk kefir grains can be used with raw milk. The method/instructions are the same regardless of whether your milk is pasteurized or raw.

Q. How much alcohol does milk kefir contain?

A. As with all cultured and fermented foods, a small amount of naturally occurring alcohol is typically present in the finished product. Although the amount will vary from batch to batch, for the typical brewing period the amount should be quite small (usually less than .05%). Of course if you suspect your milk kefir contains higher levels of alcohol and you do not want to consume higher levels of alcohol, don't drink it! We always recommend you never consume any product that looks, smells, or tastes unpleasant.

Q. Will kefir grains multiply?

A. Milk kefir grains are known to multiply, but at times they are reluctant to do so and therefore we do not guarantee kefir grains will multiply. Even if they do not multiply, with proper care, kefir grains can be used repeatedly to brew milk kefir. Generally kefir grains take 6 to 8 weeks following rehydration to begin multiplying.

Q. What supplies do I need to make milk kefir?

A. List of Milk Kefir Supplies:

- Milk kefir grains or powdered milk kefir starter culture
 - Milk: We recommend using organic milk
 - A container: We recommend using a glass container such as a canning jar
 - A covering for the jar while the kefir is culturing: We recommend a cloth or coffee filter secured with a tight rubber band (to keep the bugs out!)
 - A non-metal spoon to stir the kefir
 - A lid for the jar once the kefir is finished culturing
 - A way to remove the kefir grains once the kefir is finished culturing: [Click here for ideas on how to remove the kefir grains from the finished kefir](#)
-

Q. Will kefir culture in a dark cupboard or in a window (exposed to light)?

A. Kefir doesn't require light to culture properly. Be sure to never expose the culturing kefir to direct sun.

Q. How do I take a break from making milk kefir?

A. To take a break from making milk kefir place the kefir grains in fresh milk, place a tight lid on the container, and place it in the refrigerator. The cold will greatly slow the culturing process and the grains can be kept this way for up to several weeks. If at the end of that period you require more time, simply repeat the process with fresh milk. If you desire a longer break period, you can also dehydrate your milk kefir grains by placing them on unbleached parchment paper in a safe location (room temperature) for several days until they are completely dry. Then place the dehydrated kefir grains in a secure container (a zip-style plastic bag, glass or plastic jar, etc.) and in a cool dry place. They should keep this way for at least 6 months.

Q. If I'm making other cultured foods (yogurt, sourdough, kombucha, etc.), how far apart do I need to keep the kefir culture?

A. When items are being actively cultured (and don't have lids), we suggest keeping a distance of at least several feet (and preferably more) between items. When your cultured items are being stored in the refrigerator with tight fitting lids, there is no need to keep distance between them.

Q. Where can I view the instructions for making milk kefir from kefir grains?

A. [Click here](#) to view our milk kefir instructions.

Q. I just received my kefir grains and they don't appear to be working. What's wrong?

A. Dehydrated milk kefir grains generally take a few days of rehydration before they're ready to culture milk into kefir. Even fresh grains you've received from a friend may take a few cycles to properly kefir milk. Regional or brand differences in milk mean the kefir grains must adapt to the new milk before they can create kefir. We recommend using small amounts of milk during this time period to reduce waste. Place the kefir grains in about a cup of milk and allow it to sit for up to 48 hours. If the milk has not turned to kefir, discard the milk and place the grains in fresh milk. Repeat this process until the milk kefirs reliably within 12 to 48 hours. (The time will vary depending on the temperature.)

Q. My kefir seems to have separated into curds and whey. Why did this happen?

A. Kefir will separate if it over-cultures. To prevent this from happening, reduce the amount of time you allow the kefir to culture or reduce the temperature at which it is culturing (for instance, move it to a cooler area of the house).

Q. I've been making kefir for a while but the taste of my kefir seems to have changed. Why?

A. The taste and texture of kefir depends on several factors including the time the kefir cultures, the temperature of your home, and the ratio of kefir grains to milk. If the temperature of your home has changed (due to factors like changing of the seasons etc.), you may need to adjust the amount of time you allow the kefir to culture. If your kefir grains have multiplied, then you may find the taste and texture of the kefir change. To remedy this problem, simply remove a portion of the kefir grains and either start a second batch of kefir or find them a good home.

Milk Kefir Grains

Q. I misplaced my instructions. Where can I get another copy?

A. [Click here](#) to download a copy of our milk kefir instructions.

Q. How long does it take for the milk kefir grains to rehydrate and begin making kefir?

A. Generally the rehydration process takes 4 to 7 days. During that period, the kefir grains will need to be placed in a cup of fresh milk every 24 hours. Within the first few days, an overgrowth of yeast or a layer of froth or foam may form on the surface of the milk. This is normal. Within 4 to 7 days, the milk the kefir grains are sitting in during each 24-hour cycle should start to smell sour but clean (not rotten). The smell of fresh yeast is also common. Generally within 4 to 7 days, the milk will begin to thicken within the 24 hour period. (Please note: this time frame assumes the kefir grains are kept between 68° and 80°F; cooler temperatures may require a longer culturing period.) Under some circumstances, the kefir grains may take 2 to 4 weeks to start making kefir. Please be patient during the process.

Q. What kind of milk should I use to make kefir?

A. Kefir grains are not too picky in terms of milk and can be used with pasteurized milk or raw milk; homogenized or non-homogenized; whole milk, low-fat, or fat-free. We do not recommend using ultra-high temperature (UHT) or ultra-pasteurized (UP) milk as it has been highly processed and is generally void of bacteria which presents a less than ideal environment for the kefir grains and tends to yield less consistent results.

Q. Can I make kefir with raw milk?

A. Yes, kefir grains can be used with raw milk. There are no special instructions for using raw milk; just make kefir as you would using pasteurized milk.

Q. What do I do with the milk used to rehydrate the kefir grains?

A. The cup of milk used each day to rehydrate the kefir grains can be used for cooking provided it looks, smells, and tastes okay. Alternatively the milk can be discarded.

Q. How will I know when the kefir grains are making kefir?

A. Once the milk starts to thicken (similar to the consistency of cultured buttermilk or liquid yogurt), the kefir grains are making kefir.

Q. How much space do I need to keep between my kefir and the other cultured foods I'm making (yogurt, kombucha, rising bread dough, etc.)?

A. Kefir has a bad reputation for contaminating other cultured foods (and there are a few cultured foods that are capable of contaminating kefir); therefore we strongly recommend keeping significant space between fermenting and culturing foods (including rising bread dough made with commercial yeast). At a minimum, keep several feet (and preferably more space) between cultures. Ideally cultures should be kept on opposite sides of the kitchen or in different rooms.

Q. What's the easiest way to remove the kefir grains from the finished kefir?

A. There are several options for removing kefir grains from finished kefir:

- **Use a fine-mesh strainer.** Plastic strainers are preferable although stainless steel can be used if necessary. (Avoid all other metals.) It is important that the strainer be made of a very fine mesh as it's easy for tiny kefir grains to escape. If the kefir doesn't move easily through the strainer, try gently moving it around with your fingers or a plastic spoon to work it through the strainer. This process also works well for homogenizing kefir if portions of the kefir have started to coagulate.
- **Use a cotton bag.** Cotton muslin bags, such as the type health food stores often sell as reusable tea bags, can be used to contain the kefir grains. If using this method it is very important to ensure the bag stays submerged in milk as the bag will attract mold. A fine-mesh net bag can also be used.

- **Use your fingers.** As the kefir grains grow, it is often easiest to just fish them out with your hands. Be sure to wash and rinse your hands well as both foreign bacteria and soap can be detrimental to kefir grains.
-

Q. Can I use a metal strainer with my kefir grains?

A. While plastic or nylon is preferred, stainless steel is acceptable. Avoid all other types of metal when working with kefir grains.

Q. Some of the kefir sticks to my kefir grains. Is that okay?

A. Kefir sticking to the grains is normal and does not present a problem. Just remove large quantities and don't worry about smaller layers of kefir that remain on the kefir grains as they go into fresh milk.

Q. Do I need to rinse my kefir grains in between batches?

A. No, it is not necessary to rinse kefir grains between batches unless you suspect they have been contaminated. Kefir grains often work better if they are not rinsed.

Q. My kefir smells like yeast. Is that normal?

A. Kefir will often smell like fresh yeast. If your kefir smells like spoiled yeast (rotten), that can be a sign of contamination or that the yeast and bacteria that comprise the kefir grains are out of balance.

Q. My kefir is thick and coagulated. How do I find my kefir grains?

A. The easiest way to find the kefir grains is to first stir the kefir well with a wooden or plastic spoon to homogenize the kefir and break up the coagulated portions. Next, pour the kefir through a fine-mesh strainer and gently work the kefir through using your fingers. (Be sure your hands are washed and

rinsed well as both foreign bacteria and soap residue can wreak havoc on kefir grains.) This process should allow you to locate the kefir grains as well as homogenize the kefir.

Q. My kefir separated into curds and whey (solid on top, kefir underneath). Can I still use it? How do I keep that from happening?

A. During the culturing process, kefir will generally go through four stages: liquid milk, thickened liquid (generally the consistency of cultured buttermilk or liquid yogurt), thicker kefir (almost a yogurt consistency in some cases), and finally separation into curds and whey. How quickly the kefir moves through the various stages is a function of several factors including room temperature and the ratio of kefir grains to milk. Kefir that has separated is simply kefir that has over-cultured. It is generally safe to consume over-cultured kefir provided it looks, tastes, and smells okay. However, over-cultured kefir generally doesn't taste terribly pleasant and tends to have a carbonated texture. Over-cultured kefir can also be used for cooking if it isn't desirable to consume by itself.

To prevent the kefir from separating, it is necessary to change one of the key variables: the amount of time the kefir cultures (this is usually the easiest to change), the temperature at which the kefir is culturing (move it someplace cooler), or the ratio between the kefir grains and the milk (use fewer kefir grains). For example, if you use the same temperature and the same kefir grain-to-milk ratio, just reduce the amount of time the kefir cultures. Try to catch it when it's in the thickened liquid stage as that tends to be the most pleasant tasting kefir. If necessary, try starting a batch of kefir in the evening. The next day, check the kefir at the 12-hour mark, even giving it a quick stir to check the consistency. If it's still liquid milk, leave it for a few hours and check again. Repeat the process until you catch the kefir at the desired stage.

Q. When will my kefir grains start to grow?

A. Kefir grains will often start to grow 6 to 8 weeks after being rehydrated. Once they do start growing though, growth can be slow (not nearly as fast as water kefir grains). Please note: we cannot guarantee that kefir grains will grow or multiply as there are simply too many factors that influence

that process. Rest assured, however, that even if the kefir grains do not grow or multiply, they can be used repeatedly to make batch after batch of milk kefir.

Q. What role does room temperature play when making kefir?

A. Warmer temperatures will speed up the kefir making process while cooler temperatures will slow it down. We recommend culturing your kefir at 68° to 80°F.

Q. My kefir is forming very quickly. How can I slow it down?

A. There are two factors that determine how quickly kefir forms: room temperature and the ratio of kefir grains to milk. A warmer room will result in kefir forming faster. A cooler room will slow the process down. More kefir grains (for a given quantity of milk) will form kefir faster than a smaller portion of grains. To slow down kefir production, either lower the temperature at which the kefir is culturing or use a smaller amount of kefir grains. Please note: it is important for the health of the kefir grains that kefir form within 48 hours so it's not helpful to slow the process down further than that.

Q. My kefir is forming very slowly. How can I speed it up?

A. There are two factors that determine how quickly kefir forms: room temperature and the ratio of kefir grains to milk. A warmer room will result in kefir forming faster. A cooler room will slow the process down. More kefir grains (for a given quantity of milk) will form kefir faster than a smaller portion of grains. To speed up kefir production, either raise the temperature at which the kefir is culturing or use a smaller amount of milk for the portion of kefir grains you are using. Please note: it is important that kefir not form more quickly than 12 hours (and preferably 14 to 16 hours) so it is not helpful to speed the process up further.

Q. My kefir has had a consistent taste for several months but the last few batches taste different. What can I do?

A. The taste of kefir will often change depending on how quickly it is culturing. How quickly the kefir cultures is generally dependent on the temperature of the room and the ratio of kefir grains to milk. As the seasons change, it's not unusual for kefir process to speed up or slow down which can mean the kefir tastes different when cultured for the normal amount of time. An adjustment to the amount of time may be necessary. Alternatively, the ratio of kefir grains to milk can also affect the taste. If your kefir grains are growing or you are using less milk than normal, an adjustment may be needed to bring the kefir back to the taste you are accustomed to.

Q. My kefir grains were working but the last batch didn't thicken at all. What went wrong?

A. The most common reason for kefir grains to suddenly stop working as usual is a shift in temperature. Kefir grains operate best at room temperature. If the spot where you are keeping your kefir grains has suddenly become cooler (change in weather, draft from an air conditioner, unusually cold night, etc.), the process can slow drastically and kefir may not form in the normal amount of time. When this happens, it is best to discard the milk and immediately put the kefir grains in fresh milk and in a warmer spot. If you want to keep the kefir grains in the same milk and simply move them to a warmer location, please use caution. The danger with kefir culturing at too low a temperature is that the yeast and bacteria in the kefir grains have been slowed down by the cooler temperature, but unless the temperature is very cold (similar to a refrigerator), the bacteria in the milk is likely multiplying quickly without the full power of the kefir grains to keep it in check. Under these conditions the bacteria in the milk can wreak havoc on the kefir grains and/or cause the milk/kefir to spoil.

Q. Can I only make kefir once a week and keep the kefir grains in the refrigerator on the other days?

A. While it is tempting to reduce the amount of care kefir grains need by limiting how often you use them to make kefir, we strongly recommend against keeping your kefir grains in the refrigerator on a regular basis. Cold temperatures slow the kefir grains down putting them into a state of hibernation. Over time, it is very hard on the grains to regularly be put into and then come out of a state of

hibernation. This on-and-off routine can disrupt the yeast/bacteria balance necessary for the kefir grains to function properly, making them less efficient and reliable. If caring for kefir grains every day or every other day isn't an option, we suggest using a powdered kefir starter culture rather than kefir grains to make kefir. Each package of powdered kefir starter can be recultured a few times by taking a small amount from the current batch and adding it to fresh milk to make the next batch. (You must make a new batch at least once a week, and there is a limit to how many times you can reculture from a single packet of starter.) This product requires significantly less maintenance than kefir grains and more information on the [powdered kefir starter culture](#) can be viewed here.

Q. I left my kefir culturing on the counter for several days. The milk has separated and smells funny. Are the kefir grains okay?

A. The biggest danger with leaving the kefir grains in the same milk for more than 48 hours is that they will generally begin to starve which damages the kefir grains. Be sure to check the top of the kefir for any signs of mold. If none is present, remove the kefir grains from the kefir and place them in fresh milk. Watch the next several batches of kefir carefully to ensure that they are reliably forming kefir and that no mold develops.

Q. How do I store my kefir grains when they aren't being used (going on vacation, taking a break from kefir, etc.)?

A. To take a break from making milk kefir place the kefir grains in fresh milk, place a tight lid on the container, and place it in the refrigerator. The cold will greatly slow the culturing process and the grains can be kept this way for up to several weeks. If at the end of that period you require more time, simply repeat the process with fresh milk. If you desire a longer break period, you can also dehydrate your milk kefir grains by placing them on unbleached parchment paper in a safe location (room temperature) for several days until they are completely dry. Then place the dehydrated kefir grains in a secure container (a zip-style plastic bag, glass or plastic jar, etc.) and in a cool dry place. They should keep this way for at least 6 months.

Q. I left my kefir grains culturing on my oven and the oven was accidentally turned on so the kefir grains got very hot. Are they dead?

A. While kefir grains are very resilient, excessive heat is one thing that can kill them. If the kefir grains were in a hydrated/functioning state and were exposed to a temperature over 100°F, it is unlikely they survived. If there is any possibility of survival, you can place them in fresh milk and watch them carefully over the next 24 hours. If kefir forms, they are still functioning. If the milk separates into curds and whey without kefir first forming, then the culture isn't functioning (and the milk is behaving as it would if no culture was present).

Q. My kefir grains have multiplied and I'd like to save some as a backup. Can I freeze them? Dry them?

A. Kefir grains can be stored long-term by drying them. Rinse the kefir grains with filtered water to remove all milk residue. Lay them on a piece of unbleached parchment paper and set them in a safe place. Kefir grains will generally dry in 2 to 5 days depending on room temperature and humidity levels. Once the kefir grains are completely dry, they can be stored in a zip-style bag in a cool dry place or the refrigerator. If possible, package the dried grains with a small amount of dried milk powder. In this state, kefir grains will generally survive at least 6 months. We do not recommend freezing.

Q. My kefir grains are multiplying. What can I do with the extras?

A. Kefir grains make a wonderful gift to friends but if you have run out of people to share them with, many people find kefir grains to be delicious in a salad, as a snack by themselves, or blended into smoothies).



USING KEFIR

an overview of how to use your homemade kefir



Five Ways to Use Kefir

In addition to being an amazing probiotic beverage, kefir is also very versatile and can typically be substituted for milk, yogurt, or buttermilk in recipes.

Salad Dressing

Dairy kefir provides a wonderful tart base for your favorite creamy salad dressing. If you have a favorite creamy salad dressing recipe that calls for yogurt as the base, simply substitute kefir.

- [Creamy Ranch-style Kefir Dressing](#)
- [Milk Kefir Vinaigrette](#)
- [Cultured Waldorf Salad](#)

Ice Cream

Not only is kefir ice cream a wonderful dessert, it makes a great breakfast too!

- [Chocolate Chip-Raspberry Kefir Ice Cream](#)
- [Lemon-Blueberry Kefir Ice Cream](#)
- [Coffee Kefir Ice Cream](#)
- [No Ice Cream Maker Required Kefir Soft-Serve Ice cream](#)
- [Apple Cinnamon Kefir Ice Cream](#)

Soup

Whether it's a warm bowl of soup on a cool spring day or a bowl of cold soup on a hot summer afternoon, kefir makes a wonderful tangy base.

- [Cold Borscht with Kefir](#)

- [Chilled Cucumber-Avocado-Kefir Soup](#)
- [Okroshka](#)

Smoothies

Using kefir as the base in your favorite smoothie recipe is an easy way to add a probiotic powerhouse. Kefir can generally be substituted in any smoothie recipe calling for a yogurt base.

- [Fresh & Frozen Any Fruit Smoothie](#)
- [Kefir Chocolate Frosty](#)

Baking: Cakes, Breads and Muffins

Kefir can generally be substituted for yogurt or buttermilk in your favorite baked goods. This is a great way to use up excess kefir.

- [Cultured Dairy Chocolate Cake](#)
- [Kefir Soaked Muffins](#)
- [Kefir Banana Bread](#)

How to Use Kefir to Start Sourdough



Kefir and sourdough have a lot in common. Both are cultured foods. Both improve the nutritional value of whatever they are culturing (milk, flour, sweet water). Both contain yeast, bacteria, and acids.

So why not use kefir in the same manner as a sourdough starter: to leaven and ferment your bread?

Make a Kefir Sourdough Starter

Because kefir has many of the components of sourdough, you can make a type of sourdough starter directly from kefir! The cultures in the starter will be the same as the kefir so you will know you are getting a wonderful fermented food.

To make a kefir sourdough starter:

- Combine 1 cup each freshly ground flour and milk kefir in a quart jar.
- Stir well to combine.
- Place a breathable lid such as a towel or coffee filter over the jar and secure it tightly.
- Allow to culture 2 to 3 days at room temperature or until it is bubbling and active.
- Use in your favorite sourdough recipes.

Use Milk Kefir Directly as the Sourdough Starter

Milk kefir can be a direct stand-in for a sourdough starter whether you simply don't have a sourdough starter going, or you don't have the time to create the kefir sourdough starter above.

Simply replace the liquid in your favorite sourdough bread recipe with kefir. Mix and knead as usual. Allow to ferment in an oiled bowl for about 24 hours, or until doubled in size. Punch down and place in a buttered loaf pan. Allow it to rise until it reaches the top of the pan and then bake as usual.

Benefits of Using Kefir as Leavening

Keeping It Simple. If you are already making milk kefir on a daily basis then you've got leavening on hand. Furthermore, if you can use something you're already making as a sourdough starter then you don't have to create and maintain a separate sourdough culture.

Better Keeping Qualities. Because of the acids and bacteria naturally present in kefir, many find that kefir-leavened breads, much like sourdough, tend to keep longer than their commercial yeast-based counterparts.

Starting with a Reliable Culture. If you have ever tried to create a sourdough starter by catching wild yeasts then you know it can be hit or miss. Some wild yeasts produce great bread, others not so much. Starting with kefir can give you the peace of mind that only truly established cultures can bring.

So, definitely give kefir-leavened bread a try. You can create truly great bread with three simple ingredients: flour, salt, and kefir.

The Amazing Variety of Kefir Dairy Products

Kefir tends to be a polarizing cultured food item. Some have a hard time getting used to its tangy, effervescent flavor. But once they do they fall for it hard and swear by it for the good feeling it imparts to the body.

For those who love kefir there is more good news. Kefir grains can be used in any number of dairy products. So not only can you drink your kefir and enjoy the flavor and benefits, but you can also make it into all varieties of nourishing dairy products.

Kefir Sour Cream

Who doesn't love tangy sour cream in a taco or mixed into a salad dressing? Its creamy richness is unmistakable. It can also be super easy to.

To make: Replace the milk you normally use for kefir with heavy cream. Allow to culture a bit longer (due to the higher fat content) until thick and creamy. If it separates out a bit towards the end of culturing just stir it together. Fishing the kefir grains out can be the most difficult part of the process, so you may have to use either a wooden spoon or your (clean!) hands.

Kefir Cream Cheese

Kefir cheese is most often made by simply straining milk kefir of its whey. In the case of kefir cream cheese you would strain the kefir sour cream above.

To make: Line a sieve with cheesecloth or a coffee filter. Place kefir sour cream in a lined sieve over a bowl and allow to drain until it reaches the desired thickness. Use kefir cream cheese anywhere you would use regular cream cheese: in desserts, dips, or spread on toast. Save the whey for culturing vegetables or adding to recipes.

Kefir Butter

If you are looking for an easy method for making a cultured butter look no further. Impart the health benefits of kefir into a tangy, rich cultured butter.

To make: Make butter as you would with fresh cream, replacing the cream with kefir sour cream. Using either an electric mixer or a hand-crank butter churn beat the sour cream until the butterfat begins separating out from the protein and liquid (buttermilk). Once this happens, dump off the buttermilk, rinse the butter solids with cold water, and beat more of the buttermilk out. When the water runs clear during the butter-washing process you can salt the butter and store it for use.

Soft Kefir Cheese

A soft kefir cheese, similar in texture to a cream cheese or a chèvre, is extraordinarily easy to make. It's also very versatile and can be used in savory or sweet spreads for vegetables, crackers, or breads, or in vegetable dips or salads.

To make: Line a strainer with cheese cloth, a clean towel, or a coffee filter. Pour four cups (a little at a time if your strainer/coffee filter is smaller) into the lined strainer placed over a bowl. Allow it to strain for up to 12 hours, depending on how thick and dry you prefer it. When done you can mix in herbs, garlic, and salt for a delicious cracker spread or mix in some fruit and honey to top your morning toast or pancakes. Save the whey in a separate container to use as a starter culture for fermented vegetables as well.

Hard Kefir Cheese

This cheese is a lovely crumbly, grateable hard cheese made from kefir. What is nice about this cheese is that there is no need for any additional ingredients like rennet or a cheese starter culture. You simply make the soft kefir cheese, as stated above, and continue the process by pressing out even more of the whey.

To make: Pour milk kefir into cheesecloth, cotton bag, or tight-weave towel. Hang above a bowl or jar and allow the whey to drain off for 12 to 24 hours. Once the kefir has stopped dripping, wrap the

cheese in the cheesecloth or towel and place it in a colander. Set a plate on top of the cheese and weigh the plate down using canned foods or something similarly heavy. Start with a minimal amount of weight and continue to increase the weight every few hours until the dripping stops.

Use in salads or grated over your favorite dish.

What is wonderful about these amazing kefir products is that you only need one set of kefir grains to create all of these. These grains, if you take care of them properly, can be a one-time purchase for a lifetime of delicious kefir dairy products.

A Complete Guide to Cultured Smoothies



Many people find that blending up a smoothie provides an opportunity to pack a nutritional punch with various nutrient-dense and cultured foods. Often the pickiest of eaters will gladly sip down a big frothy glass of kefir or yogurt if it is mixed with the right ingredients.

But it is too easy to get stuck in a smoothie rut. So let's explore all of the smoothie options.

The Smoothie Base

The base of every smoothie is some type of liquid. If you want your smoothie to pack a wallop in terms of both nutrition and calories, then you want your smoothie base to contain some good protein, fat, and preferably cultures.

So here are some cultured smoothie base options:

- [Yogurt](#). Makes a tart, thick (if you use whole milk yogurt), and rich base.
- [Kefir](#). Kefir has a slightly different flavor than yogurt due to its yeasts, but it too makes a rich delicious base for smoothies.
- [Buttermilk](#). This is an odd choice to some, but cultured buttermilk is just another tangy cultured milk product that can be used on its own as a smoothie base or combined with yogurt or kefir.

- Cultured Coconut Milk. Use [coconut milk kefir](#) or [coconut milk yogurt](#) as a rich, dairy-free base to your smoothie.

Add-Ins

This is where you can add nutrition, calories, and some yumminess to your smoothies to keep them varied and interesting.

Herbal Boosters. Because smoothies usually contain a sweet component like fruit or sweetener, the sometimes grassy flavors of herbs can go undetected while adding a bit of extra nutrition. A few options are maca or Siberian ginseng powder for energy and metabolic enhancement or oatstraw for calcium.

Egg Yolks. Many people add egg yolks to their smoothies for both health and flavor reasons. Egg yolks from pastured chickens add vitamins, minerals, and good fats. They also make smoothies rich and creamy in flavor. (Exercise caution when consuming raw egg.)

Nutrient-dense Fats. Adding coconut oil, raw butter, or cod liver oil to smoothies is a good way to add some extra nourishing fats for your family. Coconut oil provides essential long-chain fatty acids, raw butter contains fat-soluble vitamins, and cod liver oil contains vitamins A & D.

Recipes

By making things interesting with various fruits, flavors, and combinations you can keep your family begging for more of those cultured smoothies that are so good for them.

- [Apple Pie Smoothie](#)
- [Watermelon Smoothie](#)
- [Cranberry Smoothie](#)
- [Pumpkin Smoothie](#)
- [Kefir Orange Julius](#)
- [Fresh & Frozen any Fruit Smoothie](#)

- [Kefir Chocolate Frosty](#)

Make Extra for Popsicles

Because smoothies are creamy and sweet they are excellent when made into probiotic popsicles. Simply take your leftover smoothie liquid (or make up a batch just for the occasion) and freeze into popsicle molds or small paper cups with popsicle sticks.

Children love these as probiotic-rich alternatives to store-bought popsicles.

So grab your blender, your kefir (or other smoothie base), and play around with some delicious cold drinks for breakfast, a snack, or dessert.

Recipes

over 35 sweet and savory ways to use kefir



Dips



Cultured Dairy Onion Dip

Most of us have eaten onion dip either at a family function, potluck, or picnic. It is often made simply with a packet of seasonings and either sour cream or mayonnaise, or a combination of the two.

But, like most packet seasonings, many popular brands contain additives like monosodium glutamate (MSG), maltodextrin, cellulose, sugars, or other chemicals and fillers that you might not want in your fresh, homemade food.

Fortunately you can make a delicious onion dip with simple ingredients you probably already have in your pantry. Using cultured dairy as the base will provide probiotic nutrition you won't find in store-bought sour cream or mayonnaise.

Ingredients:

- 2 cups cultured dairy (any combination of sour cream, yogurt, kefir, yogurt cheese, or kefir cheese that creates a very thick base)
- 2 tablespoons olive oil or butter
- 1 large onion, chopped
- 2 garlic cloves, minced

- 1/2 teaspoon sea salt (or more to taste)
- 1/4 teaspoon pepper

Instructions:

Heat a skillet over medium heat and add oil or butter. Sauté for 10 to 20 minutes, or until the onions have caramelized. Add garlic and sauté one more minute.

Remove from heat and allow onions to cool to room temperature. Once they are cooled, combine with all other ingredients. Taste for seasoning and add salt if necessary.

Refrigerate for several hours and then serve, stirring before serving if any separation occurs.



Cultured Dairy Dill Dip

Walk by the dairy aisle and you'll notice tub after tub of dips. It's tempting to stop and pick them up, but when you do you'll notice all sorts of ingredients that you may not even be able to pronounce.

But all of the chemicals additives, preservatives, and sodium aside, the base of the dip is almost guaranteed not to contain the enzymes and probiotics that you'll find in a dip made from cultured dairy products.

When you make a dip, versus a dressing, you want something thick and rich. The obvious first choice for this might be sour cream. If you do not have sour cream you can combine [sour cream](#) with [yogurt](#) or [kefir](#). Or, you can use any combination of [sour cream](#), [yogurt](#), [kefir](#), [yogurt cheese](#), or [kefir cheese](#) that you have as long as the end result is fairly thick.

Once you have decided on your cultured dairy base, try these fresh herbaceous dips chock full of healthy ingredients like garlic, onion, and lemon juice.

Ingredients:

- 2 cups cultured dairy (any combination of [sour cream](#), [yogurt](#), [kefir](#), [yogurt cheese](#), or [kefir cheese](#) that creates a very thick base)
- 3 tablespoons minced dill
- 1 garlic clove, minced finely

- Juice of 1/2 lemon
- Sea salt to taste
- 1/8 teaspoon black pepper

Instructions:

Combine all ingredients in a small bowl. Place in refrigerator and allow to set for 30 minutes before serving.



Cultured Dairy Ranch Dip

Once you have decided on your cultured dairy base, try these fresh herbaceous dips chock full of healthy ingredients like garlic, onion, herbs, and lemon juice.

Ingredients:

- 2 cups cultured dairy (any combination of [sour cream](#), [yogurt](#), [kefir](#), [yogurt cheese](#), or [kefir cheese](#) that creates a very thick base)
- 2 tablespoons finely minced parsley
- 1 garlic clove, minced finely
- 1 tablespoon finely minced onion
- juice of 1 lemon
- sea salt to taste
- 1/8 teaspoon black pepper

Instructions:

Combine all ingredients in a small bowl. Place in refrigerator and allow to set for 30 minutes before serving.



Creamy Kefir Horseradish Dip

Ingredients:

- 1 cup [strained kefir](#) (consistency of sour cream)
- 8 ounces cream cheese, [kefir cream cheese](#), or [labneh](#), softened
- 3 tablespoons salsa (non-chunky variety)
- 2 tablespoons prepared horseradish
- 1/2 teaspoon garlic salt

Instructions:

Mix together the strained kefir and cream cheese. Combine with the other ingredients and mix well. Cover and refrigerate for several hours prior to serving to allow the flavors to meld.



Kefir Artichoke Dip

Ingredients:

- 1/2 cup [strained kefir](#) (consistency of sour cream or slightly thicker)
- 1/4 cup mayonnaise (preferably lacto-fermented mayonnaise)
- 1/2 cup parmesan cheese, shredded
- 1/4 cup yellow onion or shallot, finely chopped
- 14-ounce can artichoke hearts, drained and chopped
- Fresh lemon juice to taste
- Black pepper, freshly ground to taste

Instructions:

Mix together the strained kefir and mayonnaise. Combine with the other ingredients and mix well. If serving cold, cover and refrigerate for several hours prior to serving to allow the flavors to meld. If a warm dip is preferred, place in an oven-safe dish and bake at 350°F for 20 minutes.



Turkish Kefir Dip

Ingredients:

- 1 cup [strained kefir](#) (consistency of sour cream or slightly thicker)
- 2 tablespoons chopped fresh dill or 1 tablespoon dried dill
- 2 garlic cloves, mashed*
- 1/8 teaspoon cayenne pepper
- 1/8 teaspoon crushed red pepper
- Sea salt to taste
- Olive oil

Instructions:

Combine all the ingredients except the olive oil and mix well. Cover and refrigerate for several hours prior to serving to allow the flavors to meld. Just prior to serving, drizzle with olive oil.

*Use a mortar and pestle to mash the garlic with a bit of sea salt for better flavor.



Kefir Ranch Dip

Ingredients:

- 1/2 cup [strained kefir](#) (consistency of sour cream)
- 1/2 cup mayonnaise (preferably lacto-fermented)
- 1 teaspoon dill
- 2 teaspoons Parsley
- 1/4 teaspoon garlic salt
- 1/4 teaspoon onion salt
- 1/4 teaspoon pepper, freshly ground

Instructions:

Mix together the strained kefir and mayonnaise. Combine with the other ingredients and mix well. Cover and refrigerate for several hours prior to serving to allow the flavors to meld.



Sundried Tomato, Basil, Hazelnut, and Kefir Dip

Ingredients:

- 1 cup [strained kefir](#) (consistency of sour cream or slightly thicker)
- 1/2 cup hazelnuts, toasted and coarsely chopped, divided
- 1/4 cup sun-dried tomatoes, chopped
- 1/4 cup lightly packed basil leaves, chopped
- 1/4 cup green onions, sliced
- 2 garlic cloves, minced or grated

Instructions:

Combine all ingredients together except 2 tablespoons of the hazelnuts. Mix well. Cover and refrigerate for several hours prior to serving to allow the flavors to meld. Just prior to serving, sprinkle with reserved hazelnuts.



Blue Cheese and Walnut Kefir Dip

Ingredients:

- 2 cups [strained kefir](#) (consistency of sour cream or slightly thicker)
- 4 oz. blue cheese, crumbled
- ½ cup walnuts, toasted and finely chopped
- Sea salt and freshly ground black pepper to taste

Instructions:

Combine all the ingredients and mix well. Cover and refrigerate for several hours prior to serving to allow the flavors to meld.

Flavored Kefir Drinks



Kefir Eggnog

This winter holidays are all about family, friends, and of course food. The food during this season is fairly familiar to us all, whether we've always eaten a standard American diet or not.

One of the ubiquitous holiday beverages is eggnog. It is in every grocery store come November and it beckons you with its nostalgic memories of a thick, rich, sweet holiday beverage.

You can also make eggnog at home, with the naturally occurring probiotics and enzymes inherent in the main ingredients: fresh milk, raw honey, egg yolks, and in this recipe, milk kefir.

Adding milk kefir to your fresh milk will give you a health boost and give your eggnog a very slight tang. It's a great way to get some probiotics into your favorite holiday beverage!

Ingredients:

- 1 cup [dairy kefir](#)
- 3 cups fresh cow or goat milk
- 4 egg yolks, from pastured chickens (exercise caution when consuming raw egg)
- 1-1/2 teaspoons vanilla extract
- 3 to 4 tablespoons raw honey or maple syrup

- 1/4 teaspoon freshly ground nutmeg, plus more for serving

Instructions:

1. Combine all ingredients in a blender and blend until smooth. Alternatively, combine all ingredients in a quart jar, tightly seal the lid, and shake until well combined.
2. Chill and serve with additional ground nutmeg and whipped cream if desired.



Chai-Spiced Milk Kefir

Ingredients:

- 2 cups fresh milk kefir
- 1 chai tea bag (preferably organic, or herbal for caffeine-free)
- Sweetener to taste (honey, maple syrup, etc.)

Instructions:

Perform the first ferment on the milk kefir, and strain off the grains for a new batch. Put the freshly cultured strained milk kefir into a sealable jar, and add the tea bag. Be sure that any staples or metal pieces do not contact the kefir directly.

Cover the lid tightly and allow to culture at room temperature for an additional 12 to 24 hours. Remove the tea bag and refrigerate. Before drinking, you can add sweetener to taste. Enjoy!

Pancakes



Apple Cinnamon Kefir Pancakes Recipe

Ingredients:

- 1 cup dairy kefir
- 1 tablespoon melted coconut oil, sunflower oil, or grapeseed oil
- 1 teaspoon vanilla extract
- 1/2 cup oats, ground in blender or food processor (can substitute 1/2 cup flour)
- 1/2 cup flour
- 1 egg
- 1 tablespoon butter, melted
- 1 tablespoon raw honey or maple syrup
- 1 teaspoon baking powder
- 1/4 teaspoon baking soda
- 1/4 to 1/2 teaspoon salt (to taste)
- 1/4 to 1/2 teaspoon cinnamon (to taste)
- 1 small apple, chopped
- Chopped nuts (optional)

Instructions:

In a bowl, mix together the oats, flour, baking powder, baking soda, salt, and cinnamon. In a blender, mix together the kefir, oil, vanilla extract, egg, butter, and honey or maple syrup. Add the dry ingredients to the wet ingredients and blend just until smooth. Add the apple and mix just until combined. (Don't puree the apple.) Drop 1/4 cup batter for each pancake on a hot griddle greased lightly with coconut oil or butter. Top the baking pancake batter with a few chopped nuts if desired. Makes 12 pancakes.



Cultured Dairy Soaked Gluten-free Buckwheat Pancakes

Pancakes are one of America's favorite breakfast foods. Served in diners and restaurants across the country, these fluffy, white, syrup-laden cakes aren't exactly considered healthful. And they certainly aren't something those with a gluten intolerance can eat.

What is edible for those with a gluten sensitivity, as well as nutrient-dense and even more delicious than those diner pancakes is buckwheat pancakes.

Despite its name, buckwheat is not a member of the wheat family at all but a gluten-free seed-like grain. It is high in vitamins and minerals and when soaked, as in this recipe, makes a delicious and nutritious pancake.

Buckwheat has a lovely nutty flavor and makes these pancakes not only hearty and filling, but much more interesting than your run-of-the-mill white-flour pancakes. The soaking process listed below is helpful as the acids in the cultured dairy help to break down the grains making the pancakes softer and the grain more digestible.

Ingredients:

- 1-1/2 cups buckwheat flour
- 1-1/4 cups cultured buttermilk or kefir
- 2 eggs, lightly beaten

- 3/8 teaspoon fine-grained sea salt
- 1/2 teaspoon baking soda
- 1/2 teaspoon baking powder
- 1/2 teaspoon vanilla extract
- coconut oil or butter for frying

Instructions:

1. 12 to 24 hours before you plan to serve the pancakes begin the soaking process. Mix buckwheat flour and kefir or buttermilk until flour is well moistened. Cover and place in a warm place (next to oven, on top of refrigerator) for 12 to 24 hours. The longer the better.
2. In the morning start preheating your pan over medium-low heat.
3. While that is heating, mix all other ingredients into buckwheat flour/milk mixture. At this point it may be very bubbly, like a sourdough starter. Stir it down a bit, just to take a little air out of the batter. If you don't do this your pancakes will have holes all the way through them.
4. Add coconut oil or butter to your preheated pan. Ladle 3 tablespoons (or 3/4 of a 1/4 cup measure) of batter into pan for each pancake. Cook for 3 to 5 minutes or until bubbles pop and the top dries out just a bit. Flip and cook for 2 more minutes on the other side, or until nicely browned.
5. Serve with plenty of grass-fed butter or ghee and homemade jam, syrup, molasses, or raw honey.

Salads



Creamy Orange Kefir Fruit Salad

Sometimes you just need a sweet but nutritious addition to your meal. Using cultured dairy, like kefir, can help you achieve this. Throwing in some fruit keeps it sweet and simple.

But sometimes you don't want to eat a smoothie with your savory supper. This quick fruit salad with a cultured dairy dressing might be just the thing!

It takes the traditional flavors of an Orange Julius – orange, dairy, and vanilla – and turns it into an eat-with-a-fork salad. And the pistachios give this a beautiful color combination.

Give it a try!

Ingredients:

- 3 large oranges
- 1/2 cup [dairy kefir](#) (cultured for approximately 24 hours)
- 1 tablespoon raw honey
- Splash of vanilla extract

- 2 to 3 tablespoons chopped pistachios

Instructions:

1. Peel the oranges and split apart into segments. Cut into bite-sized pieces, removing any seeds as you come across them. Place in a bowl and set aside.
2. In a pint-size jar add the kefir, honey, and vanilla. Put the lid on the jar and shake it very well until combined. If your kefir is really cold and you are finding that the honey clumps at the bottom of the jar, take a fork or a spoon and scrape it off the sides and bottom, then cover and shake again until the honey dissolves.
3. Pour the dressing over the orange pieces, cover, and refrigerate at least 25 minutes to chill and allow flavors to meld. When you are ready to serve the salad sprinkle the chopped pistachios over the top and serve.



Kefir Cucumber Salad

Kefir can be used for more than just savory dishes. In this tangy, fresh cucumber salad kefir marinates with garlic, apple cider vinegar, and cumin to become a deliciously fresh dressing.

Serve alongside your favorite main dish or at a barbecue for all of the goodness of kefir with any meal.

Ingredients:

- 2 medium cucumbers, quartered lengthwise and diced
- 2 garlic cloves, minced
- 1/4 to 1/2 teaspoon sea salt, or to taste
- 1 teaspoon apple cider vinegar or well-fermented kombucha
- 1/2 cup whole milk kefir
- Pinch of ground cumin

Instructions:

Combine all ingredients in a medium-size bowl. Allow to marinate in the refrigerator, covered, for fifteen minutes before serving.

Smoothies



Instant Probiotic Smoothie

Smoothies are a great vehicle for introducing all sorts of probiotic-rich foods into your meals. Most often this comes in the form of a cultured base of the smoothie like yogurt, kefir, or coconut milk kefir. These are all great nutrient-dense foods that lend a probiotic punch to your smoothie.

But what if you are at the last of your kefir, haven't cultured that gallon of milk yet, or simply aren't in the mood for a dairy-heavy smoothie and yet still want a probiotic-rich drink?

The answer to that question is also the answer to the “what can I do with all of that whey” question people often ask when making yogurt or kefir cheese or other strained cultured dairy products.

Whey Ice Cubes

If you're looking for an easy way to introduce probiotics to your smoothie (or other foods) then consider freezing the whey left over from cultured dairying into ice cubes. You can then use those ice cubes blended with fruit, juice, more cultured dairy, or other flavorings for a delicious, probiotic-rich smoothie.

Smoothie Recipes Using Whey Ice Cubes

You can use whey ice cubes in a smoothie with this very simple recipe formula:

Ingredients:

- 4 cups liquid (milk, juice, water, dairy-free milk, or any combination)
- 10 to 12 whey ice cubes
- Fresh fruit (berries, bananas, pineapple, mango, etc.)
- Flavorings (vanilla, cinnamon, nutmeg, cocoa powder, etc.)
- Sweeteners (raw honey, sucanat, maple syrup, etc.) to taste

Directions:

Pour liquid into blender. Add ice cubes and pulse a few times or until ice has been broken up a bit. Add fruit and flavorings and blend until completely smooth.

Or, try it in these fun smoothies with whey ice cubes:

- [Kefir Chocolate Frosty](#)
- [Fresh & Frozen any Fruit Smoothie](#)
- [Eggnog Shake](#)

What's So Great about Whey?

Whey that comes from a cultured dairy product contains all sorts of great stuff, like...

- Probiotics
- Organisms that ease digestion
- Trace minerals

Whey has been used in historical times to preserve food, assist digestion, and even nourish convalescents.

So freeze up that extra whey for a probiotic-rich smoothie any time!



Cranberry Smoothie

Ingredients:

- 1/4 cup frozen cranberries
- 2 tbsp. frozen blueberries
- 1-2 tsp. lemon juice (fresh is best)
- 1/4 cup cranberry juice
- 1/2 cup kefir, yogurt, buttermilk, or a combination
- Dash of vanilla extract (optional)

Directions:

Add fruit, juice, and vanilla to a blender and process until smooth. Blend in kefir and serve chilled or at room temperature. Makes one serving.



Apple Pie Smoothie

Ingredients:

- 1/4 cup unsweetened applesauce (best if frozen or chilled)
- 3/4 cup yogurt, kefir, or buttermilk
- Dash of vanilla extract
- Dash of cinnamon
- Dash of nutmeg

Add all ingredients to a blender and process until smooth. Serve chilled or at room temperature.



Banana Smoothie

Ingredients:

- 1 cup yogurt, kefir, or buttermilk
- 1 banana
- 1 teaspoon vanilla
- Sweetener to taste (1 tablespoon raw honey or maple syrup, or a little stevia)

Add ingredients to a blender and process until smooth. Serve chilled or at room temperature. Makes one serving.



Basic Fruit Smoothie

Ingredients:

- 1 cup yogurt, kefir, or buttermilk
- 1/2 cup frozen fruit (berries work well)
- 1/2 banana
- Ice cubes (can reduce amount or omit if banana is frozen)

Add all ingredients to a blender and process until smooth. Serve chilled or at room temperature.

Makes one serving.



Blueberry Smoothie

Ingredients:

- 3/4 cup yogurt, kefir, or buttermilk
- 1/2 cup juice (orange and grapefruit work well)
- 1 cup blueberries
- 1 banana

Add all ingredients to a blender and process until smooth. Serve chilled. Makes one serving.



Healthy Smoothie

Ingredients:

- 2 cups yogurt, buttermilk, kefir, or combination
- 1 cup fresh or frozen fruit
- 1 to 3 tablespoon coconut oil (melted and allowed to cool a bit)
- Pinch of stevia or small amount of raw honey (if desired for sweetness)

Combine in a blender and serve cold. Makes 1 or 2 servings

Additional ingredients that can be added:

- Fresh egg yolk from pastured chickens (exercise caution when consuming raw egg)
- Handful of spinach or other greens
- Bee pollen
- Brewer's yeast



Orange Smoothie

Ingredients:

- 2 to 3 tablespoons frozen orange juice concentrate
- 3/4 cup yogurt, kefir or buttermilk
- 1/4 teaspoon vanilla extract
- 1 cup ice cubes

Add all ingredients to a blender and process until smooth.



Pumpkin Smoothie

Ingredients:

- 1 cup kefir, yogurt, buttermilk, or a combination
- 2 tablespoons organic pureed pumpkin
- Dash of vanilla extract
- Pinch of cinnamon and nutmeg or pumpkin pie spice (to taste)

Add ingredients to a blender and process until smooth. Serve chilled or at room temperature. Can be served topped with a dash of cinnamon-sugar. Makes one serving.



Mango Smoothie

Ingredients:

- 1/4 cup banana
- 1/4 cup mango, papaya, or guava
- 1/2 cup kefir, yogurt, buttermilk, or a combination*
- Sweetener (1 tablespoon raw honey, maple syrup, small amount of stevia)

Add all ingredients to a blender and process until smooth. Best served chilled. Makes one serving.

*If desired, coconut milk kefir or yogurt can be used.



Watermelon Smoothie

Ingredients:

- 3/4 cup seedless watermelon chunks
- 1/2 cup kefir, yogurt, buttermilk, or a combination
- 3 tablespoons orange juice

Use blender to puree watermelon until smooth. Add juice and kefir, yogurt, or buttermilk. Process until blended completely. Makes one serving.



Tropical Smoothie

Ingredients:

- 1 frozen banana
- 1 cup fresh pineapple
- 2 tablespoons coconut milk (optional)
- 3/4 cup kefir, yogurt, buttermilk, or combination*
- Sweetener to taste (1 tablespoon raw honey, maple syrup, or sugar, or a small amount of stevia)

Add all ingredients to a blender and process until smooth. Best served chilled. Makes 2 servings.

*If desired, coconut milk kefir or coconut milk yogurt can be used.



Cantaloupe Kefir Smoothie

Summer is the best time to be making fruit smoothies, especially the berry varieties. But when you've got cantaloupes coming in from the garden or market and simply can't eat enough of them, it is time to look past the berries and throw the cantaloupe into the blender.

This smoothie is icy cold and refreshing for the hottest of days. The cultured milk kefir packs a nutritional punch, and the pinch of salt really brings out the flavor of the cantaloupe.

Ingredients:

- 4 cups kefir (goat milk works as well as cow milk)
- 3 to 4 cups ice
- 1 Small cantaloupe, peeled, seeded, and chopped
- 1 tablespoon raw honey
- Pinch of sea salt

Instructions:

1. To a large (at least 8-cup) blender add the kefir followed by the ice followed by the chopped cantaloupe, blending after each addition. Squeeze in the honey and add the pinch of salt. Blend for 20 to 30 seconds until all is combined and smooth.
2. Taste and add more sweetener if desired. Serve on a hot summer day.



Peachy Kefir Smoothie

In the height of summer nothing is better than a ripe peach. It epitomizes the bounty of the season with its soft juiciness. And blended up with kefir it becomes a sweet, cultured treat on a hot day. So make a peach pie, peach cobbler, or peach crisp; but don't miss out on this peachy kefir shake for breakfast, snack, or dessert.

Ingredients:

- 4 cups kefir (goat milk kefir or coconut milk kefir works as well as cow milk kefir)
- 3 to 4 cups ice
- 4 to 6 large, fresh, ripe peaches (if using frozen, use less ice or none at all)
- 1 tablespoon raw honey, or more to taste
- 1/2 teaspoon ground ginger or cinnamon (optional)

Instructions:

Add kefir to blender followed by peaches and ice, if using. Add in the honey and blend until smooth. Taste and adjust sweetness by adding more honey and additional spices as above.

Variation:

For a peach pie smoothie use cinnamon and add crushed graham crackers to the top of each serving glass.

Tasty Treats



Kefir Ice Cream Recipe

Ingredients:

- 2 cups kefir (can substitute yogurt, buttermilk, or whole milk)
- 1 cup kefir cream made with heavy cream (can substitute non-kefired heavy cream)
- 2 eggs
- 2 teaspoons vanilla extract
- 3/4 cup organic sugar (can use raw honey or maple syrup but reduce the amount by approximately 40%)

Beat eggs together well then beat in sugar. (Start with a conservative amount of sweetener and add in small increments to taste; keep in mind that the finished ice cream will be slightly less sweet than the

kefir mixture before it's frozen.) Blend in the kefir cream and vanilla. Transfer to the ice cream maker and follow the instructions that came with the machine.

Variations:

- Chocolate: Add 2/3 cup organic cocoa powder. Increase the amount of sweetener to taste.
- Strawberry: Add 1/2 to 1 cup crushed strawberries.
- Mint: Decrease the amount of vanilla extract and add 1 to 3 teaspoons mint extract. If desired, add organic dark chocolate chips or a 3-ounce organic dark chocolate bar, chopped.
- Turtle: Add toasted organic unsweetened coconut flakes, toasted organic pecans, and organic dark chocolate chips or a 3-ounce organic dark chocolate bar, chopped. Drizzle with raw honey or homemade caramel sauce.



Chocolate Kefir Popsicles Recipe

Ingredients:

- 1 cup milk kefir or [coconut milk kefir](#)
- 2 to 3 tablespoons unsweetened cocoa powder
- 2 to 3 tablespoons honey or maple syrup (can substitute 1 to 2 tablespoons sugar if desired)
- 1/2 teaspoon vanilla, hazelnut, or mint extract (alcohol-free)
- Dash of salt

Instructions:

Blend all ingredients together thoroughly. Adjust the amount of honey or sugar according to your taste preferences. (Keep in mind that freezing reduces the sweet taste so the mixture should be slightly sweeter than you wish the finished popsicles to be.) Pour the mixture into popsicle molds or an ice cube tray. If using an ice cube tray, insert toothpicks into each cube. Freeze until solid.

Variations:

- Puree 1/2 banana and add to the mixture.
- Add crushed toasted hazelnuts.
- Add a tablespoon or two of mini chocolate chips.



Cultured Ice Cream (and how to make it without a machine)

What if you could eat ice cream every day... and shout it from the roof tops? If the only thing stopping you is the fact that you think it'll kill your healthy diet then here is good news for you.

Store-bought ice cream is probably not going to be on your daily to-eat-for-health list. Homemade ice cream could certainly make your splurge-once-a-week list. But cultured ice cream, made from probiotic-rich cultured dairy, could certainly get a pass as your daily habit.

You see you can have your cake and eat it too when you make it from home-cultured dairy products such as sour cream, crème fraîche, kefir, and yogurt. So go ahead and splurge on these delicious dairy delights be proud!

Kefir

Kefir has such a unique flavor that you wouldn't necessarily picture it as the base of a frozen treat. But when paired with the proper flavorings and sweeteners it makes a winning combination. Try out this [Kefir Ice Cream](#) recipe.

Making Ice Cream without a Machine

If you're going to be making a lot of ice cream, you may want to invest in an ice cream maker, if you haven't already.

But if you can't bring yourself to buy another appliance, you should know that it is possible to make ice cream without a machine. The technique is simple, but it does take more hands-on time than the machine would.

1. Pour the ice cream base into a freezer-safe shallow pan. Allow to freeze for 30 minutes.
2. Remove and mix with a fork or sturdy utensil to break up all of the ice chunks to get a smoother ice cream.
3. Repeat every 20 minutes until the ice cream has firmed up to your liking, 2 to 4 hours, and then serve.



Kefir Dessert Sauce Recipe

Ingredients:

- 2 cups kefir cream or [strained kefir](#) (can substitute strained yogurt)
- 1 teaspoon vanilla
- 1/4 cup sugar, honey, or maple syrup (to taste)

Blend all ingredients. Cover and chill at least an hour in the refrigerator before serving. Serve over fruit, cake, etc.



Whipped Cultured Cream to Top Your Dessert

While most people would agree that too much sweet food isn't a great idea for a standard diet, everyone likes a tasty dessert now and then.

There are ways to make more nutrient-dense desserts that will satisfy your sweet tooth with natural sweeteners and healthy fats. Using pastured eggs and cultured dairy can actually decrease the need for a sweetener in the recipe since they leave both your taste buds and your tummy satisfied.

A great way to add enzymes and probiotics to a dessert is through a cultured whipped cream topping. Most people are familiar with the process of whipping heavy cream to aerating and lighten it. Add a touch of maple syrup or honey and a dash of vanilla and you've got something that cannot be beat by a frozen "whipped topping" that might not even contain real cream!

By using cultured cream you'll also add a nuttiness, in the case of crème fraîche, or a tang in the case of sour cream or kefir cream. It is quite common in European countries to top a sweet dessert with the unique taste of cultured cream.

There are several options for making whipped cultured cream:

- [Sour cream](#)
- [Kefir cream](#)
- [Crème fraîche](#)

Each of these will produce a rich, flavorful topping when whipped, but each has a slightly different flavor. Try one of the cultures you already have, or experiment with all three!

Here's how:

Whipped Cultured Cream

- 2 cups cultured cream ([sour cream](#) or [kefir cream](#) or [crème fraîche](#) made with heavy cream)
- 4 tablespoons maple syrup (more or less to taste)
- Dash of vanilla extract, cinnamon, nutmeg, or other flavorings

Place cultured cream, maple syrup, and flavoring in a large bowl and beat using a hand-held mixer or a whisk until soft peaks form.



Make a Cultured Enzyme-rich Breakfast Parfait

A parfait, by definition, is a dessert made of layers of various components: usually something creamy and something fruity or sweet. But, if made with the right ingredients, a parfait can be a full-on breakfast, containing protein, fat, long-lasting carbs, and loads of enzymes.

A tasty breakfast with these three components can leave you satisfied for hours and full of nutritious energy to start your day.

Creamy Layer

This is the bulk of your breakfast calories. For an enzyme-rich cultured breakfast use cultured dairy. Make sure that you are using a whole-milk kefir or yogurt, or that you combine a lower-fat ingredient with a higher-fat ingredient for staying power.

Try any combination of the following:

- [Whole milk yogurt](#)
- [Whole milk kefir](#)
- [Sour cream](#)
- [Yogurt cheese](#)

- [Kefir cheese](#)

A serving of 1 to 2 cups of this cultured dairy base should be used for each parfait.

Fruit Layer

Nothing compliments cultured dairy quite like delicious, fresh fruit. Lower-glycemic fruits like berries give you all the flavor and sweetness with less sugar content than higher-glycemic fruits like bananas.

Choose your favorites, including:

- berries
- bananas
- apple
- mango

If you want an extra boost of cultures and enzymes mix your fresh fruit with a cultured fruit chutney. Using fruit chutney alone might be a bit too much tang for your taste buds, but when mixed with sweet fresh fruit you will have a lovely balance.

Nutty/Crunchy Layer

Adding a third layer will give you not only a texture contrast, but an added boost of protein, fats, and nutrients. There are some obvious choices, and some surprises:

- Chopped nuts of all kinds
- Nut butters: peanut, almond, sunflower seed
- Chocolate or peanut butter chips
- Crumbled plain sourdough crackers
- Homemade or store-bought granola

Any of the above can be used in any combination with whatever you happen to have on hand.

Making the Parfait

In a tall glass, layer one-third of the cultured dairy, one-third of the fruit, and one-third of the toppings. Repeat, ending with toppings. You'll have a breakfast easy enough for any day of the week

but special enough for brunch with guests; nutrient-dense, energy-sustaining, and made of pure nourishment.

Composed Parfait Ideas

Add some additional flavors like vanilla or cinnamon along with some sweetness like a drizzle of raw honey. Whip up one of the following combinations for a delicious cultured breakfast:

- Cultured dairy base + apples + cinnamon + walnuts
- Cultured dairy base + mango + pistachios
- Cultured dairy base + banana + crumbled sourdough crackers + peanut butter
- Cultured dairy base + raspberries + vanilla + almonds
- Cultured dairy base + strawberries + vanilla + almonds and chocolate chips
- Cultured dairy base + peaches + cinnamon + granola
- Cultured dairy base + blueberries + lemon zest + walnuts