

Getting Started

Topics:

Introduction to fermented dairy

Making clabber

Making kefir

Making Mesophilic Yogurt

Making Thermophilic Yogurt

Making fermented butter

Kefir

Fermented Milk Drink

Method

Pour milk into a suitable glass jar with lid. Place kefir grain in jar. Cover and leave in a warm location in your kitchen. Wait 24 hours. Open the jar and look and smell the contents. It should be slightly thickened and have a slightly yeasty, slightly yogurty pleasant smell. Observe the side of the jar. There should be no bubbles and no separation of whey. Now taste a small amount. It should be slightly sour, but very pleasant. If you want to wait to make more kefir then place the jar directly into the refrigerator. It will last there for about a week and can be used to make more kefir any time. Whenever you are ready to consume and make more kefir move on to the next step below.

When ready, place a plastic or stainless steel strainer in a bowl and pour the contents of the jar into the strainer. Use a rubber spatula to very gently coax the kefir through the strainer making sure not to bruise or injure the kefir grains.

Wash to fermentation vessel (although this is an optional step as many people continuously reuse the same jar without washing). Pour the more milk into the vessel and place the grains in the milk to begin a new batch of kefir.

Ingredients

- 2 cups milk the freshest, highest quality possible.
 Can be made with raw or pasteurized milk.
- 2 Tablespoons kefir grains







Use the strained kefir right away and/or store in the refrigerator.

Mesophilic Yogurt

Ferments at room temperature

Ingredients

- Milk the highest quality, freshest milk possible
- Mesophilic yogurt reserved from your previous batch



Method

This recipe requires an heirloom mesophilic yogurt to provide the proper bacteria to activate the fermentation. If you were lucky enough to obtain heirloom mesophilic yogurt from someone then follow this recipe.

If you purchased a freeze-dried culture from a commercial source then follow the directions on the packet to make your first batch of yogurt and then, once you have the yogurt, follow this recipe.

It is best if the milk is already at room temperature when you add the culture to it, especially when making a large volume of yogurt. Cold milk from the refrigerator will take hours to come to room temperature and the fermentation will not begin properly until it warms up. However, in a pinch it can be done. Here is how I do it...

Place a heavy bottomed saucepan or stock pot on the scale. Tare it to zero. Pour the desired amount of milk into the pot and weigh it. Multiply the weight of the milk by .02 to calculate the amount of previously made yogurt you need to add to culture it. Place the pot on the stove and warm over low heat until room temperature making sure to stir occasionally to avoid it burning on the bottom or forming a skin on the top. When it is warm to the touch it is ready. You want room or body temperature. Place the jar or other container you will be making the yogurt in on the scale. Tare to zero. Measure out the proper amount of yogurt (culture) into the bottom of the jar. When the milk is warm pour about a half cup of

Mesophilic Yogurt continued

milk into the jar. Whisk the yogurt and milk together until smooth. This step helps make sure the yogurt is even distributed and not chunky in the jar.

Then pour the rest of the milk into the jar, stir to distribute evenly, cover, and leave in a warm place in your kitchen where it will not be disturbed.

It is very important that the jar is not moved while it cultures. The curd is very soft as it develops and moving it will break up the curd releasing whey and resulting in a yogurt that is not thickened properly.

After 8-12 hours check your yogurt by removing the lid and tilting the jar gently to one side slightly. If it pulls away from the side slightly and seems thickened it is finished. Place in the refrigerator and cool. It is ready to eat any time. Remember, don't eat it all!!! You need to save some back to make the next batch.

Notes on Mesophilic Yogurt		



Thermophilic Yogurt

Ferments at higher temperatures

Ingredients

- Milk the highest quality, freshest milk possible
- Thermophillic yogurt reserved from your previous batch

Method

This recipe requires an heirloom thermophillic yogurt to provide the proper bacteria to activate the fermentation. If you were lucky enough to obtain heirloom mesophilic yogurt from someone then follow this recipe. If you purchased a freeze-dried culture from a commercial source then follow the directions on the packet to make your first batch of yogurt and then, once you have the yogurt, follow this recipe.

Place a heavy bottomed saucepan or stock pot on the scale. Tare it to zero. Pour the desired amount of milk into the pot and weigh it. Multiply the weight of the milk by .02 to calculate the amount of previously made yogurt you need to add to culture it.

Thermophilic Yogurt continued

Important - Do NOT add the culture yet! Place the pot on the stove and slowly heat the milk until it reaches 160-180 degrees Fahrenheit, stirring to avoid it burning on the bottom or forming a skin on the top. While the milk is heating prepare an ice/water bath in your sink or a bowl large enough to accommodate the cooking vessel. Once the target temperature is reached, continue to maintain the temperature for 30 minutes, stirring constantly. At the end of 30 minutes place the pot in the ice bath, continuing to stir to drop the temperature to 110 degrees as quickly as possible.

Place the jar or other container you will be making the yogurt in on the scale. Tare to zero. Measure out the proper amount of yogurt (culture) into the bottom of the jar. When the milk is warm pour about a half cup of milk into the jar. Whisk the yogurt and milk together until smooth. This step helps make sure the yogurt is even distributed and not chunky in the jar. Then pour the rest of the milk into the jar, stir to distribute evenly, cover, and maintain 110 degrees in a location where it will not be disturbed. There are numerous ways to maintain 110 degrees including, but not limited to using a commercial yogurt maker, placing in a large food dehydrator (such as an Exacalibur with the shelves removed), placing in an oven with the light turned on, or placing in a preheated cooler and filling with 110 degrees water to just below the rims of the jars.

It is very important that the jar is not moved while it cultures. The curd is very soft as it develops and moving it will break up the curd releasing whey and resulting in a yogurt that is not thickened properly.

After 8-12 hours check your yogurt by removing the lid and tilting the jar gently to one side slightly. If it pulls away from the side slightly and seems thickened it is finished. Place in the refrigerator and cool. It is ready to eat any time. Remember, don't eat it all!!! You need to save some back to make the next batch.



Fermented Butter

 \mathcal{A} traditional way to make butter

Ingredients

- Cream the freshest, highest quality cream you can get.
 Raw is best, pasteurized is okay, ultra-pasteurized will not work.
- Kefir or mesophilic yogurt you can use a regular commercial thermophilic yogurt in a pinch

Method

Just like with the yogurt it is best if the cream is already at room temperature when you add the culture to it, especially when making a large volume of butter. Cold cream from the refrigerator will take hours to come to room temperature and the fermentation will not begin properly until it warms up. However, in a pinch it can be done.

Fermented Butter continued

Place a heavy bottomed saucepan or stock pot on the scale. Tare it to zero. Pour the desired amount of cream into the pot and weigh it. Multiply the weight of the milk by .02 to calculate the amount of kefir or mesophilic yogurt you need to add to culture it. Place the pot on the stove and warm over low heat until room temperature making sure to stir occasionally to avoid it burning on the bottom or forming a skin on the top. When it is warm to the touch it is ready. You want it to be at room or body temperature.

Place the jar or other container you will be making the butter in on the scale. Tare to zero. Measure out the proper amount of culture into the bottom of the jar. When the cream is warm pour about a half cup of it into the jar. Whisk the culture and cream together until smooth. This step helps make sure the kefir or yogurt culture is even distributed and not chunky in the jar. Then pour the rest of the cream into the jar, stir to distribute evenly, cover, and leave in a warm place in your kitchen where it will not be disturbed.

Allow to culture for 12 - 24 hours. It is very important that the jar is not moved while it cultures. Use a small spoon to scoop a little out of the jar. It should have thickened to the point where the impression made by the spoon is still present. Now taste it. It should have a wonderful, slightly sour taste and amazingly complex aroma. If so, you have made crème fraîche! Scoop a little out and place it in a smaller jar. If you are happy with its consistency and taste, cover and place directly into the refrigerator. If you would like it thicker or want it to develop more flavor then cover and set in a warm place to continue to ferment until it exhibits the characteristics you desire. Then place in the refrigerator.

Fermented Butter continued

Place the cultured cream in the bowl of a stand mixer making sure not to fill it more than half way. The cream will expand as it fills with air and you need to leave room for the expansion. Attach the whisk attachment to the mixer. If your mixer has a splash guard, by all means use it! When the buttermilk first separates from the butterfat the mixture becomes unbalanced and splashes everywhere! Some people even wrap their entire machine with plastic wrap to avoid the mess! And, I don't blame them.

Turn on your mixer beginning with the slowest setting. Slowly increase the speed until you are whisking at one of the highest speeds. Find the happy medium that allows you to whisk at a high speed without spraying cream all over the kitchen. Watch it closely. The cream will go through different stages - from cream to whipped cream to separating into butter and buttermilk. You want to catch it right before it separates. In fact, you MUST catch it just as it begins to separate! If you don't you will be cleaning the mess up for hours. You will know when it is about the separate because you will begin to see the buttermilk separating and small pearls of butter emerge. As soon as you see this begin immediately turn the speed down to reduce the splashing. Soon, all of the cream will have turned into butter and buttermilk. Turn the speed down to the lowest setting and let it continue to whisk at a low speed for an additional 30 seconds or so. This helps expel a little more of the buttermilk and makes your job doing it by hand easier.

Collecting the Buttermilk: Remove the whisk and using a spatula scrape off as much butter clinging to it as possible. Sit a large bowl in the sink and place a large sieve or colander on top. Using the spatula scrape all of the contents of the mixing bowl into the colander allowing the buttermilk to drain into the bowl beneath. Pour the buttermilk you collected into a jar, cover, and place in the refrigerator.

Fermented Butter continued

Removing the Remainder of the Buttermilk: Your job now it to remove all of the remaining buttermilk from the butter. Any buttermilk remaining in the butter will shorten its shelf life. Hold the sieve containing the butterfat and residual buttermilk under faucet and let cold water pass through. This accomplishes two things. First, it washes away much of the residual buttermilk and second, it chills the butterfat making it firmer and easier to handle. Once you have sufficiently rinsed the butter place it in the large bowl. Fill the bowl with fresh cold water. Using the spatula, or your hands, repeatedly fold the butter onto itself squeezing the remaining buttermilk out of the butter. As the buttermilk is released it will cloud the water. When the water becomes cloudy, pour it out, add fresh and repeat until the water does not become cloudy any longer indicating there is not more buttermilk left.

Notes on Fermented Butter

Fermented Butter

Alive & full of probiotics



Directions continued

Salting the butter: Salting the butter is optional. However, since it draws out moisture from the butter it does increase the shelf life. I salt my butter at 1%. To do this, place a bowl on a scale and tare to zero. Place the butter in the bowl and weigh it. Multiply the weight of the butter by .01 to calculate the amount of salt to add. Sprinkle the calculated amount of salt on top of the room temperature butter and fold in with a spatula to fully incorporate. Let sit in the bowl for about 15 minutes to allow the salt to draw out any residual moisture. At the end of the time pour off any water that has accumulated at the bottom of the bowl, pat dry, wrap. You can store the fermented butter at room temperature for several days, in the refrigerator for several weeks, or the freezer for several months.

Notetaking Guide
LIKE A
HUMAN.

	Notetaking Guide
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Week 2 Reflection

Use the space below to reflect on our 1st virtual class and list any questions you may have. Remember to post in the Facebook group so we can learn from one another.

