

## Useful Video Links:

<https://www.youtube.com/watch?v=xIZrlm9tsrw>  
<https://www.youtube.com/watch?v=Zn1OEks0Gwo>

## Time & Temperature

The most common problem I receive from customers is thin yeasty kefir. What happens is the yeast produces CO<sub>2</sub> and cause the grains to rise. They get stuck in the curds up top and the milk on the bottom stays thin. The end result is a thin soupy kefir. Still OK to consume but far from enjoyable to most.

So how do you correct this? Well the two most important factors when fermenting is time and temperature. If you want to just maintain the current balance of yeast and bacteria a temperature around 72-74 degrees is recommended. You see, the yeast can thrive at any temperature. It only really slows down when you place the grains in the fridge, however the bacteria can only really thrive at a warmer temperature. When it is colder than 70 degrees the yeast is producing more than the bacteria. Only when it gets above the 72 degrees the bacteria begins to keep up. The grains will ferment the milk even in the fridge but for a healthy and balanced colony for the long term 72 degrees is very important. Keep in mind if you are fermenting at a higher temperature your milk will appear to be a little less thick and creamy. After straining your grains out putting your finished kefir in the fridge for another 12 hours or so helps to thicken it up.

So with the above guidelines you can begin to alter the balance of the yeast and bacteria as you see fit.

Another tip I give is **STOP STIRRING**. Most of the time what happens to people just starting out (and I am speaking of myself as well) is they see the grains all rise to the top and the milk below is not doing anything so they think, "oh I better stir them up" Well, this only makes matters worse because all this is doing is giving the yeast more food (lactose) and when you do not have an abundance of bacteria (the slime) the curds separate from the whey and voila, thin, yeasty, soupy kefir. If you are stirring and fermenting at a lower temperature it basically creates the perfect storm.

The third tip is **time**. You really need to ferment your milk (especially in the colder months) at least a full day, and if you are trying to build up the bacteria I would suggest a day and a half. What happens is the yeast begins to ferment the milk creating a small amount of ethanol alcohol and it is the ethanol alcohol that the grains need to stimulate the growth of Kefiran (the slime). This needs time for this to happen, so while it's possible to ferment for a shorter amount of time. I recommend at least a full day and possibly a little longer when needed. For those worried about the alcohol content, there is only about .5%-2% in the end product and you really shouldn't even notice it.

The final tip is: **DO NOT RINSE**. What happens is you are basically rinsing away the built up bacteria and starting over so it will take a few days to recover. It doesn't harm the grains but it will alter the finished kefir until you can get a good balance again.

Basically, all the above tips help the production of bacteria and now, you are wondering how this all works. Here is a little bit of science behind it. The bacteria or kefir (the slime) is in a category called a Polysaccharide. Pectin is also a Polysaccharide. Pectin is used as a thickening agent in many foods such as jellies and some companies put pectin in the store bought kefir to create that smooth creamy effect.

It shouldn't be too challenging to keep the optimal temperature in the hotter months but some may need to get a little creative. I use an upstairs closet and when I need to, I use a space heater. I have had some use their oven (of course only when it's not on) or a cupboard. Usually the oven without the light is all you need but some need to keep the light on. Be careful though some ovens can get up to 100 degrees with just the light on.

Hopefully these few tips will help set you up for success in your kefir journey. Cheers!