

Learn to Home Brew: A Series of Tutorials Using Mead

I wanted to learn to make red wine, but since I had never done so and did not have nearby friends to brew with, I decided to teach myself using online resources, books, and experimenting.

What I found with the online resources and books is that any particular source leaves a lot out. The writers seem to assume that you already know certain things. I didn't.

If you research enough, and put all the pieces together, then you can get some pretty good information. I decided to create for myself a series of tutorials that would take me step by step through learning about all the different equipment and ingredients I would eventually need to make wine. Since I was doing it for me, I thought I'd share what I learned with other interested people.

Why start with mead? Mead (also called honey wine) is by far the easiest wine to make. It takes the least amount of equipment or fiddling with. It is almost impossible to get wrong. It is not very expensive to make (\$10-15 per gallon). You can play around with all kinds of different flavors and experiment at a relatively low cost.

Once you have gone through the tutorials, you will have approximately one gallon of mead from each tutorial and you will know how to use all the equipment you would need to make beer or wine.

Let's get started with your first gallon of mead!

Mead Number 1

The simplest possible mead contains honey, water, and yeast. That is all you need to make mead. Mead has been made since ancient times with just those ingredients. Fairly early on people started adding herbs to their mead, especially herbs thought to be medicinal. Fruits and spices are other popular additions to mead.

I like the different flavors of mead, so my very first batch included some fruit and spices. If you want to, you can make this first mead with only honey, water, and yeast and so have a truly traditional mead.

This tutorial is in 2 parts. Part 1 is mixing the mead and putting it away to ferment. Part 2 is bottling the mead.

Read through all of mead number 1 and make sure you understand everything and have everything you need before starting. The home brew equipment is easy to find online if you do not have a local store where you can buy it. Search for home brew equipment online. Much of what you need you will already have in your kitchen.

I started with a one gallon mead starter kit from Home Brew Stuff. I did not use all of the kit for the first batch, but will be using most of it for mead number 2.

Part 1: Making the Mead

Collect this equipment, wash in hot soapy water, rinse well, and then set on a clean towel on the counter to dry.

Stuff you probably have or can easily get at the store:

- A bowl large enough to hold the honey (3 1/2 pounds of honey is about 5 cups so pick a bowl that will hold at least 1 ½ quarts)
- A long handled metal or hard plastic stirring spoon (not wooden)
- 2 quart pitcher (this will hold the water before you add it into the honey)
- Large funnel (this will make it possible to pour the honey and water into the carboy)
- Something plastic or metal that is long and thin (like a skewer) that will fit into the mouth of the carboy

In addition, you will need a kitchen scale large enough to weigh about 4 pounds. This does not need to be washed since you will set a clean bowl on it and put the honey into the bowl.

Stuff you need if you are going to add the orange and spices

- Something to cut the orange on (such as a plate or plastic cutting board – not wood)
- Knife to cut an orange
- Measuring Teaspoon

Stuff specific to home brewing (this all came in the kit I got)

- 2 gallon food grade plastic bucket
- Plastic lid for bucket with an airlock hole
- 1 gallon glass Carboy (you can get plastic, I just like glass)
- Cap for carboy with an airlock hole
- 3 part Airlock

Why do I say no wood? The reason is that wood is hard to get really clean. We could use a sanitizer to be sure, but it is just as easy to avoid using wood equipment when making mead.

If you have friends who home brew, they might be all upset that I did not suggest you sanitize the equipment. There is a reason. Honey itself has antibacterial properties, so if there were some bacteria or other organisms on your equipment after washing it in warm, soapy water, the honey will kill it. (For that same reason, we will not be putting our spices into a sanitizer before adding them.)

This is different from brewing beer or other wines! With other brews you will sanitize the equipment after washing it.

I am starting simple, keeping it easy. I will add other steps in later tutorials so you get to practice doing all the things you will need to do to make beer or other wines.

Here is my equipment for mixing a batch of mead:



Mead ingredients

- 3 1/2 pounds of Honey (any kind)
- About a gallon of water – if you do not like the taste of your tap water, then get a gallon of bottled spring water. I have a well and just used the well water right from the tap.
- 1 teaspoon baker's yeast (be sure it is fresh, not past the expiration date)
- About 1 Tablespoon Vodka for the airlock (you can use just water – I like the extra protection of vodka to keep stuff out of my wine)

Optional ingredients

- Whole large orange (wash in warm, soapy water and rinse well, then cut in slim slices, leaving the skin on)
- Handful of Raisins
- 1 Cinnamon stick
- 2 Whole cloves
- Pinch of allspice
- Pinch of nutmeg

Your home brew friends may be unhappy about using baker's yeast. I had so many people ask why I was not using wine yeast. So here is the reason. Baker's yeast is very forgiving. It tolerates a wide range of temperatures. Wine yeast has specific temperatures it likes. For this first mead, I am trying to make it very hard to fail.

This is different from making beer or wine where we will use specific yeasts to get specific flavors and results.

I do not have a climate controlled place (like a basement) to ferment my wine, so I need to use something that does not mind temperature fluctuation. I do have heat for the winter, but not air conditioning for the summer. I'll probably be making red wine in the winter to avoid problems with it being too hot. In general mead likes to ferment at about 65°F or even 60°F, so a cool basement works very well for this. But remember we are using baker's yeast so a higher temperature is fine, up to about 75°F-80°F.

You will want a place to leave your wine alone for 2-3 months. This should be someplace relatively dark, quiet, and cool. I put it in my kitchen pantry in a place where I could see it without having to move it. You don't want to move it at all for 2-3 months. Some people use a corner of a closet, or perhaps you have a tall kitchen cabinet where you can leave it.

Mixing instructions

Using the bowl and kitchen scale, measure out 3 ½ pounds of honey. Pour the honey into the 2 gallon bucket, scraping the sides of the bowl well with your mixing spoon to get as much honey out as possible.

Fill your 2 quart pitcher half full of hot (not boiling) water. Pour it into the bucket with the honey and use your mixing spoon to stir well until the honey is dissolved in the water.

Put the glass carboy into the kitchen sink, put the funnel in the mouth of the carboy, and then carefully pour the honey mixture into the carboy. It helps a lot to have one person hold the funnel steady while a second person pours. But I managed it alone.

If you are using the optional ingredients, put them in to the carboy now. See how the carboy narrows at the top to a neck? Add cool water to the carboy up to the bottom of the neck. The water should be about 3 inches from the top of the carboy.

Put the cap on the carboy. Put your clean thumb over the hole, pick up the carboy and shake well to mix all the ingredients. Be sure you keep your thumb tight over the hole!

The carboy should feel about room temperature. If it still feels warm, let it sit until it is about room temperature.

Dissolve the yeast into a teaspoon of water. Take the top off the carboy and pour the yeast in. Swirl it around a bit with the skewer, then put the top back on the carboy. You do not have to mix a lot, just a little at the top so the yeast is mixed in a bit with the honey water. The yeast will move around just fine on its own.



Fill the airlock with clean water or vodka. Insert airlock into bung (the hole in the cap).

Filling the 3 part airlock

Take off the cap, remove the dome shaped bit.



Holding the big part over the sink, carefully fill it with water or vodka to the fill line. Try not to pour too much down the center tube while doing this (especially if you are using vodka).

Put the dome shaped thing over the center tube, with the opening of the dome pushed down into the liquid.

Finally put the cap back on. The stick part on the bottom gets pushed firmly into the hole in the middle of the cap. Here is what it should look like. This is actually a bit too full. I had a problem later when the bubbles came up through the air lock.

Put the carboy away in your relatively dark, quiet, cool place. Leave it alone. You are allowed to look at it, but don't touch! I checked on the mead every day for the first month to be sure it was not bubbling up through the air lock.

You should see bubbling within the first 3 days, certainly by the end of the first week. If you do not, the problem could be 1) it is too cool, move the mead to someplace a bit warmer or 2) the yeast was too old and therefore dead, try again with fresh yeast.

How long it takes to finish fermenting depends completely on the temperature. You should check on your mead at least once a week after the first month.



Notes

Some people say you should boil the honey in the water. This is not necessary (remember honey has antibacterial properties already) and changes the flavor of the mead. You do not want to boil the honey and kill any beneficial ingredients in it.

Some people ask why you are fermenting in the carboy; that is what the plastic bucket is for. It is true that usually we will ferment in the plastic bucket. But for this first mead we are not using any equipment to know when the mead has stopped fermenting. So we have to be able to watch it to know when it is complete.

My mead bubbled over into the airlock at one point about a month after it had been brewing. We got an unusually hot day for here (75 instead of 65) and the yeast got all happy and bubbly. I pulled the airlock out, cleaned it, filled it with vodka again, and put it back in. Everything seemed fine, and the mead turned out well.

How to Know the Mead has Finished Fermenting

You will know when the mead has finished fermenting when the mead is very clear and you do not see bubbles. It does not hurt anything to leave the mead in the carboy until you are sure it is finished fermenting. For our second mead we will be more scientific, but it is fun to watch our first ever batch of mead as it ferments. Here is what the mead looks like when it is ready to bottle. See the commercial bottle of mead on the right for comparison.



Part 2: Bottling the Mead

Hooray! Your mead has finished fermenting and you are ready to bottle it.

Take your carboy from where it has been fermenting and put it up on a counter. Let it sit until all the sediment has settled, about 1 day. The picture above is one day after I moved my mead. The outside of the carboy had some sticky on it from when the mead bubbled over the first month, which is why it does not look as perfectly clear as the commercial bottle.

Collect this equipment, wash in hot soapy water, rinse well, and then set on a clean towel on the counter to dry.

Stuff you probably have or can easily get at the store:

- Large funnel
- Something to store the finished mead in (I got a case of 16 oz EZ lock bottles aka Grolsch bottles)

Stuff specific to home brewing (this all came in the kit I got)

- 2 gallon food grade plastic bucket
- EZ Siphon (to make it easy to get the mead out of the bottle)
- Siphon hose
- Hose clamp



Put the bucket on a flat, steady chair below the counter. Attach the end of the siphon hose onto the curved neck of the siphon. Remove the airlock from the carboy and put it in the kitchen sink. Remove the cap from the carboy and put it in the sink too.

Push the bottom of the siphon into the neck of the carboy. Put the bottom of the hose into the bucket.

It should all look like this:



Pump the neck of the siphon up and down a couple of times (the whole length of the tube) until the mead starts flowing into the bucket. Keep lowering the siphon as the mead comes out. This is called racking off the mead.



Keep the siphon above the sediment! You don't want any sediment in the bucket! As you get toward the bottom, you can press the clamp in one stop to slow down the flow of mead. Just lift the siphon up out of the mead to stop and let all the mead in the tube flow down into the bucket.

Your carboy will look something like this.

You should have a nice clear bucket of mead (about ½ full).

Pour a little mead from the bucket into a glass and taste it. It will probably have a bit of a harsh alcohol taste, but should not taste spoiled in any way.

Put a nice clean Grolsch bottle in the kitchen sink. Put the funnel in the neck of the bottle. Pour mead from the bucket into the funnel until the bottle is full to within about 1 inch from the top. It is easier if a friend helps with this part!

Repeat until you have used up all the mead. You should get about 7 pint bottles full of mead, maybe a little more.

Close the caps on the bottles, put them back in a nice quiet, dark, cool place and let sit for 6-8 months. This allows the flavors to blend and smooths the alcohol taste.

I did put bottle 7 in the refrigerator to sample while waiting for the rest of the mead to be ready. 😊

Notes

What happens if I get sediment in the bucket? If it is a really small amount, you do not have to worry about it. If it is quite a bit, don't panic. Instead, clean out your carboy, the cap, and the airlock. Use the funnel to pour the mead from the bucket back into the carboy. Put the cap back on, fill the airlock, and insert the airlock into the cap. Let the mead sit until it is very clear and the sediment has settled to the bottom.

Then go back with your nice clean 2 gallon bucket, and cleaned out siphon and hose, and repeat siphoning the mead off the sediment. Then you can go on to bottling.

Cleanup

It was easy to get the orange pieces out. I just turned the carboy upside down over the kitchen sink and drained the liquid. Then I shook it to get a piece of orange into the neck and scooped it out with my finger. I just kept repeating until it was all out.

Clean up everything with hot soapy water, rinse well, and let dry. Then put it all away until you are ready to make more mead.