

# Home Fermentation Day *Honey For Mead*

## Mead Making 101 – Making a Traditional Mead

### Required Supplies:

- Fermentation Vessel (1 Gallon Carboy)
- Honey - ¼ gallon (3 lbs)
- Water - ¾ gallons
- Yeast (3 gram per gallon of unfermented mead)
- Yeast Rehydration Nutrient – Go Ferm – 1.25 x yeast
- Yeast Nutrient – Fermaid O – 4 grams
- Fermenter Thermometer – Stick on works best
- Hydrometer – Used for measuring gravity (fermentable sugar)
- Bung and Airlock – Used to allow for safe fermentation and to prevent contamination
- Measuring Cup
- Kitchen Thermometer – Used to measure temperature when rehydrating yeast

### Optional Supplies:

- Test tube
- Sanitizer – StarSan or SaniClean preferable
- Stabilizer – Used for back sweetening if needed (Potassium Sorbate)
- Temperature control – Used to help manage fermentation temperature
- Scale – Capable of measuring to 0.01 grams
- Oxygenation Tools (such as an air stone) – Used to add oxygen during fermentation
- Clarifying Agents (Biofine, Sparkloids, SuperKleer)

### Things to remember:

Clean Everything – Mead making does not require heat, which removes one of the safeguards prior to pitching our yeast. Make sure everything is clean and sanitized. Anything that touches your mead should first be cleaned. Test tubes, hydrometers, airlocks, everything. Keep them clean. You'll be happy you did.

Log/Record Frequently – Logging and recording your brewing adventures can serve many purposes. It aids in repeatability, it helps you remember when the last feeding was or how much you gave it, you can track temperature changes and how that effects fermentation speed and time, and our personal favorite, it will give you much needed information when trying to research if/how something went wrong with your batch. Track everything you can. The scientific numbers like the gravity and temperature are a requirement, but don't forget to track aroma and tasting trends. Write down where you like the sugar best or the bouquet was your favorite. You'll want to know those for when you remake the batch and start to tweak it.

## **Preparing Your Mead**

Supplies Used: Water, Honey, Fermentation Vessel

It's time to make your mead "must". "Must" an unfermented wine. Mix the water and honey together in the 1-gallon carboy until fully integrated. This will take some time. Make sure there are no large sections of undissolved honey. If the honey crystallized, use warm water rather than room temperature to aid in integration. Log the date you are making the batch, starting gravity, and temperature.

## **Rehydrating The Yeast**

Supplies Used: Mixing Bowl or Large Cup, Yeast, GoFerm, Water – 4 ounces (110° F if possible)

Mix the water (4 ounces) and GoFerm in a large bowl or large cup. Mix until fully integrated (a whisk will help greatly if you have one). Once integrated, check the temperature of the mixture. The rehydration liquid will need to be in the suggested range for the yeast being used. For 71B this is between 95°-98°F. For Voss Kviek this is 86°-95°F. If you are using a strain other than these 2, please consult the rehydration temperature on the packaging.

After confirming the rehydration liquid is at the appropriate temperature pour the yeast over the top. Do not mix it. As the outer husks of the yeast break away and the yeast begins to bloom, it will sink naturally. Cover with a clean napkin or towel and wait 15 minutes. Don't forget to log everything you are adding to your mead.

## **Tempering The Starter**

After the first 15 minutes, check the temperature of the yeast starter and your unfermented mead. You should see a small amount of film or bubbles at the top. This is a good sign. If they are more than 10° apart the starter will need to be tempered. This can be done by mixing equal parts yeast starter and mead must. Start by adding 4 ounces of the must to your starter. That will now bring your total volume to 8 ounces. Gently stir the mixture and cover as before, waiting another 15 minutes. Repeat these steps until the must and starter are within at least 10° of each other. The closer to the same temperature they can be, the better.

## **Pitching The Yeast**

Supplies – Bung, Airlock

It's time to inoculate your mead. Pour the yeast starter into your fermenter, making sure to leave some room for fermentation to occur at the top of your carboy. Put the cap on the mead, and slowly swirl the contents. This will ensure that yeast is spread all around. And with that, your mead is officially off and going! Be sure to add the bung and airlock to your fermenter. Don't forget to add water/sanitizer to the fill line of the airlock to prevent contamination.

## Degassing and Oxygenating

Optional Supplies: Air stone

Two of the most important steps in keeping your fermentation active and healthy are removing CO<sub>2</sub> from your mead and introducing oxygen. Degassing (removing the gas in a liquid) is as simple as picking up the fermenter and slowly swirling it. You'll notice the airlock will start to bubble vigorously. Set the fermenter down and let it bubble. As it slows down swirl it again. Repeat these steps until the airlock is no longer moving. At this point, remove the airlock and slowly swirl again. This will allow the residual CO<sub>2</sub> to escape and oxygen to replace it. Put the airlock back on and swirl one last time. This will allow some of the oxygen to integrate in the mead.

## Feeding

Supplies Used: Mixing Bowl or Small Cup, Fermaid O

Feeding your mead is a requirement. If you don't give your yeast a Nitrogen source to eat it will get stressed. Stress can cause off flavors and aromas which are undesirable. It can also produce fusel alcohol which is also very undesirable.

To feed, simply mix a small amount of warm water with the suggested feeding dosage. If you prefer, you can also mix the feeding with a small amount of your mead. This can prevent dilution, if that is a concern. Once integrated, pour the mixture into your mead and gently swirl to disburse it. Be sure to only do this after degassing your mead!

The suggested feeding for this traditional mead is as follows:

Yeast: 71B

When	Volume
24hrs After Yeast Pitch	1 gram
48hrs After Yeast Pitch	1 gram
72hrs After Yeast Pitch	1 gram
@15° or 7 Days	1 gram

Yeast: Voss Kviek

When	Volume
24hrs After Yeast Pitch	4 grams

Be sure to log every feeding. Feedings are a great time to also add notes for how your mead is smelling and tasting. You won't regret taking those extra notes.

## **More Degassing**

Even after feeding has stopped it still helps to degas your mead. Continue to swirl your mead daily until  $\frac{1}{2}$  of the sugar (or you reach 11° brix) has been eaten. At that point it is not advised to do anything that could introduce additional oxygen to your mead.

## **Logging and Finishing Your Mead**

After the final feeding has occurred it's time for nature to take its course. The mead will continue to ferment and will start bubbling slower and slower and the sugar is depleted. During this time, it's important to still log your progress every day. Track your gravity, temperature, and any other data that is relevant at that point in time. If you have the capability to track pH that would be good as well. Your mead is finished fermenting when the gravity has reached 0° or it has not moved in 3+ days.

## **Clarifying**

Optional Supplies: Biofine/Sparkloid/SuperKleer, Additional Fermentation Vessel

Once the mead has finished, it's time to clear it up. Let's start cold crashing! Take your airlock off and put the twist cap back on. Place the fermenter in the fridge. Cold is an amazing clarifying technique. Within a few days you will notice a stark difference. The haze will have dissipated and been replaced by a quickly clearing, beautiful mead. Leave the jug in the fridge as long as you would like to continue cleaning up your mead. Optionally, there are additives that can be put into your mead to expedite this even further. Check with your local homebrew store and follow the instructions provided. Often brewers will move the mead into another container at this point.

## **Stabilizing (Optional)**

Optional Supplies: Potassium Sorbate, Potassium Metabisulfite

After tasting your newly fermented mead you may want to add some additional sugar to it. Dry meads are not for everybody and there's nothing wrong with that. If you're going to add sugars back it helps to ensure they're not going to continue to ferment. If you don't stabilize there is the risk of refermentation occurring, or even worse bottle bombs. Consult your local homebrew store for stabilization options available and dosages.

## **Packaging Your Mead**

This will be left completely to you. Bottles are a great option. You can also move it to a new container and bulk age your mead over time. Time makes meads better, there is no doubt about that. Your local homebrew store will have options available to you and can help you with those steps.