

Mead

a brief guideline

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Here you will find some basic recipes for making mead. I have collected a sampling from Internet and CompuServe to supplement the basic recipe in the Known World Handbook.

First, however, some **basic tips and information**.

Meads come in several basic types: meads, metheglins (spiced meads), and melomels (meads made with fruit and/or fruit juices added). Many of these, especially the melomels, are "species specific" (as it were). For example, acyser is by definition a mead made with apples or apple juice.

Equipment and Supplies

Use un-blended honey when making mead, and raw honey if at all possible. Thus, unless there is someone with an apiary in your neighborhood, the best place to get honey is at a health food store or roadside stand. That being said I get mine from two places, Market Place foods in Poulsbo and I have found that a local butcher in my neck of the woods carries Raw Honey, strained but not pasteurized. If the honey has bits of wax, or other particulate matter in it, that can be strained out before cooking. Do NOT, under *any* circumstances, use "blended to death" honeys, like "SueBee". Remember: the taste and character of the honey you use will be the principal determinants of the taste and character of your mead.

Don't worry if your honey has clouded or become crystallized. Just place the container of honey in a hot water bath and it will again liquify. I do not recommend that you put honey that is in a crystallized state into the pot, it will caramelize and not dissolve and inhibit the fermentation.

Please note that meads don't need any malt added, for *any* reason. Apart from altering the flavor and character, there are quite enough fermentable's present already, thank you! :-)

Use a white wine yeast in brewing mead; "Montrechet" is recommended. *Don't* use ale or lager yeast; the end result will most likely be exploding bottles! Also don't use brewers yeast found at the health food store. This is DEAD yeast, and will do nothing. I like Pasteur Champagne yeast. I get this from a brewing store in Seattle, (Pike Place Brewery).

Most mead recipes call for the addition of some citrus juice or tea (tannin). This is important, as it balances the sweetness, preventing it from becoming cloying. This is the same reason caffeine is added to many sodas.

The molecular structures of the sugars involved in meads are different from those found in brews. Thus, meads can take anywhere from a few weeks or months to several years to age properly. And, they won't taste very good if one isn't patient; the time is necessary.

When you boil the water use a pot that is steel or ceramic lined, do not use aluminum it will add a taste and start to corrode the interior. I have one pot that leaks pretty good before I learned that one.

When adding honey to hot or boiling water, STIR CONSTANTLY!! Otherwise, the honey will go straight to the bottom of the pot, where it will caramelize, scorch, and otherwise ruin the whole thing. KEEP STIRRING, until the honey is *completely* dissolved.

Using a long handled spoon will keep your hands and wrists from getting cooked as well. I have been able to find them in wood and Nylon fiber at kitchen supply stores and Brewing and vinting stores.

You will notice, in mead recipes, instructions to skim off any scum that forms as the mead heats up. This is very important, as that scum is the equivalent of the krausen in beer. Apart from the nasties in it that can contribute to hangovers, there are nasties in the scum that can adversely affect the flavor and appearance of the finished mead.

I generally simmer for 45 minutes to an hour. Don't let it be a rolling boil, if the scum is yellow, you've got it too hot. When you take it from the heat, the mead is now called "must".

When you add the yeast, called pitching, ensure the must is at room to body temperature. room temperature is best to give the right yeast reproduction rate. If it is too hot the yeast will die. One recipe recommends adding yeast at 80 degrees and fermenting and storing at 70-75 if possible.

You will also need a one gallon jug (carboy), some recipes will call for a 5 gallon carboy but leave that until you've tried a few one gallon batches. A one gallon batch will rack into 5 wine bottles. It is important that you use either wine or beer bottles for the final corking. Glass Soda bottles generally can't handle the pressure and the bottoms will burst. Plastic bottles will add a taste to the mead and I do not recommend them either.

I use Aquarium tubing for a syphon and a glass rod. I recommend that you buy a racking tube from a vinting supply store that has a filter of sorts to prevent the drawing up dregs.

Now a few words on **Sterilizing**

Clean and sterile bottles and equipment will help prevent your mead in becoming vinegar or you and your drinking buddies from becoming sick.

Clean all bottles of visible grime using hot water and a bottle brush. NO SOAP! Sterilize bottles by rinsing with a sterilizing solution. Leftover solution should be capped in a jug and saved for the next time.

Sterilizing solutions are: 1/4 cup of Sodium Bisulfite liquid to one gallon of water; one teaspoon of Sodium Bisulfite to one gallon of water; or 1 ounce of Bleach to one gallon of water.

Rinse all Sterilizer Solution from bottles. Invert in cases or on a bottle tree. Soak corks for 10-15 minutes in a pan of Hot Water (almost boiling). Sterilize syphon and racking tube.

Airlocks are recommended but as you will see in the first recipe that I list, it is not required.

The length of time mead is allowed to ferment is the other principal factor in determining not only the final alcoholic content, but how dry vs. how sweet your mead will be. Remember: mead is not necessarily a sweet drink! Also, meads can be sparkling, or still. It's all a matter of individual preference.

Racking the Mead

Elevate the carboy of mead to be bottled and place syphon in carboy. Start syphon and fill the bottles with Minimum of aeration by placing the syphon hose in the bottom of the bottle. Fill the bottle so airspace after corking is 1/4 to 1/2 of an inch. Cork the bottles using a corker, apply labels and store the mead upright for 3-5 days, checking corks to see they remain in place. Lay the bottles on their sides or inverted in the cases for storage. This will keep the cork wet and a tight seal.

A word of warning about mead hangovers: they are the stuff of legend-- and rightly so! The combination of high alcohol content (relatively speaking) and high sugar content are perfect for the induction of the Ultimate Hangover. One author I've read on meads, in an attempt to convey to the reader the potential severity of a mead hangover, referred to the Biblical story of Judith and the Holofernes. The author pointed out that Judith saw to it that the Holofernes got thoroughly drunk on mead, waited until they had slept awhile, and then had the Hebrew army attack-- beating on their shields! As the author put it: "What else could the Holofernes do but throw down their arms and accept slaughter with gratitude?"

Personally, I consider this description of mead hangovers to be both apt and astute. :-)

BASIC SMALL MEAD

Cher Feinstein

NOTE: All equipment mentioned below is assumed to be either well-cleaned or sterilized, as needed.

In a 1 gallon enamel pot, simmer the following until the infusion is done to taste: 2-3 whole cloves, lightly cracked; 2 sticks of cinnamon, broken up; 2 thin slices peeled fresh ginger root. Add 2-4 tsp. orange peel (how much depends on the honey-- with orange blossom honey use less, for example) and simmer a little longer.

Add enough water to bring the volume up to 3 quarts. Bring back up to a simmer. Add 2 lbs honey, stirring constantly. Some of the warm water can be ladled back into the honey container to rinse it.

DO NOT BOIL! Continue to simmer at a moderate rate, skimming off any white scum that forms on the top. If the scum is yellow, the heat is too high. Once no more scum forms, turn off the heat, place the lid on the pot, and leave overnight.

The next day, strain out as many of the spice particles as practicable. Pitch the yeast. Replace the pot lid; the condensation on it will form a seal.

Twelve hours later, rack the mead into a gallon jug, leaving the dregs of the yeast. After racking, top off the jug if needed, filling it to the base of the neck. Take a piece of clean paper towel, fold it into quarters, and put it over the mouth of the jug. Secure with a rubber band. Allow to ferment 36 hours. If the paper towel becomes fouled during this period, replace it with another.

After 36 hours, taste the mead. If it is still too sweet for your taste, ferment longer. Repeat this as necessary, until a desirable level of sweetness/dryness is achieved.

Place mead in refrigerator for 8-12 hours, then rack into a fresh gallon jug. Seal new jug tightly, and place in refrigerator to carbonate for 12 hours.

Once the mead is nicely carbonated, add 1/4 cup of vodka or grain alcohol to the jug to kill off the yeast. Rack into a fresh jug again, seal tightly, and place in refrigerator for 3-4 days.

The mead may then be bottled; Grolsch bottles work extremely well for this purpose.

This is a "quickie" mead, drinkable in 2 weeks. However, it does improve considerably with age, and letting it age for at least a couple of months before drinking is recommended. This mead is excellent chilled.

-Date: Thu, 15 Nov 90 14:41:24 PST
-From: Kevin Karplus <karplus@ararat.ucsc.edu>
-Subject: Mead recipe

Several people have been asking about mead recipes lately. Here is one I've used for years. Incidentally, the meads I like best are strong dessert wines, with take over 5lbs of honey per gallon of water. They take months to ferment and years to mature, but they're great for sipping.

Mead
(a fermented drink made from honey)
Generic Recipe

The basic ingredients of mead are honey, water, and yeast. The proportions of the honey and water determine the final strength and sweetness of the drink, also how long it takes to make. The ratio ranges from 1 lb. honey per gallon of water for a very light "soft-drink" to 5 lbs. per gallon for a sweet dessert wine. The less honey, the lighter the mead, and the quicker it can be made. I've successfully made a 1 lb/gallon mead in as little as three weeks, while my strongest mead (5 lb/gallon) was not bottled for six months, and could have stood another few months before bottling. Elizabethan recipes varied considerably in strength, but 3 or 4 pounds of honey per gallon was common.

The mead I make is spiced, so is sometimes referred to as "metheglin." Elizabethan meads used large numbers of different spices and herbs, but not always in large quantities. Kenelm Digby, after giving the recipe obtained from "Master Webbe, who maketh the Kings Meathe," has this to say:

The Proportion of Herbs and Spices is this; That there be so much as to drown the luscious sweetness of the Honey; but not so much as to taste of herbs or spice, when you drink the Meathe. But that the sweetness of the honey may kill their taste: And so the Meathe have a pleasant taste, but not of herbs, nor spice, nor honey. And therefore you put more or less according to the time you will drink it in. For a great deal will be mellowed away in a year, that would be ungratefully strong in three months. And the honey that will make it keep a year or two, will require a triple proportion of spice and herbs.

[The Closet of the Eminently Learned Sir Kenelm Digby Knight Opened, 1669]

Here is a partial list of flavoring agents (mainly herbs and spices) mentioned for meads by Digby: agrimony, angelica root, avens, baulme leaves, bay leaves, bettony, blew-button, borage, cinnamon, clove-gilly flowers, cloves, dock, eglantine, elecampane, eringo roots, fennel, fruit juice (cherries, raspes, Morrello cherries), ginger, harts-tongue, hopps, juniper berries, limon-pill, liver-worth, mace, minth, nutmeg, orris root, parsley roots, raisins, red sage, rosemary, saxifrage, scabious, sorrel, strawberry leaves, sweet marjoram, sweet-briar leaves, thyme, violet leaves, wild marjoram, wild sage, wild thyme, and winter savory.

In my own brewing, I use mainly "sweet" spices (cinnamon, ginger,

nutmeg). The main herb I use is tea. Tea is an important addition to the mead. It provides tannic acid, to give the drink a bit of bite. It is particularly important for sweet meads, which can otherwise have a rather syrupy taste (like Mogen David wines). Any sort of tea will do--I've used genmai cha (a very light Japanese green tea), lapsang souchong (a smokey Chinese tea), China Rose (a black tea with rose petals), jasmine, oolong, and others. If you want to use Lipton's, that should work as well. I have not seen any period recipes that use tea in mead, but all my batches that omitted tea were not as good. I am more interested in producing good flavor than in strict authenticity, so continue to use tea.

Other ingredients I use include small amounts of orange or lemon juice, fruit, cloves, and other spices. I've used bay leaves, cloves, rosemary, anise, and galingale, in addition to the spices listed above. Be careful not to over-spice the mead! It is probably safer to use less of fewer spices, until you've had some experience.

As examples, here are the quantities for two of my mead batches:

Batch: M4

Type: Quick Mead

3 gallons water
5 lbs honey (Wild Mountain)
1/3 cup jasmine tea
1/2 tsp ground ginger
2 tsp cinnamon
1/2 tsp ground allspice
1/2 tsp ground cloves
1/2 tsp ground nutmeg
ale yeast

Started: 1 July 1979

Yeast added: 2 July 1979

skimmed: 12 July 1979

racked: 15 July 1979

bottled: 28 July 1979

yield: 3.1 gallons

clarity: excellent

sweetness: fairly sweet

sediment: slight

carbonation: variable (some popped corks)

color: light gold

An excellent batch

Batch: M7

Type: Sack Mead

3 gallons Water

16 lbs honey
1/4 cup keemun tea
1/4 cup oolong tea
2 tsp cinnamon
1/2 tsp whole aniseeed
18 cardamum seed clusters crushed (about 1 tsp)
20 whole allspice slightly crushed (about 3/4 tsp)
about 1 inch galingale root crushed (about 2 1/4 tsp)

(Fining agent: 1 pkg unflavored gelatin in 1 cup of water)

Started: 26 Dec 1981
Wine Yeast added: 27 Dec 1981
1 rack: 10 Jan 1982 (vat -> carboy)
2 rack: 31 Jan 1982 (carboy -> carboy)
3 rack: 30 April 1982 (carboy->carboy)
gelatin added: 23 May 1982
bottled: 3 July 1982
Yield: 3.7 gallons

Comments:

sweet, smooth, potent. A dessert wine. This is perhaps the best of my 20 or more batches of mead.

I use tap water for brewing, but if your tap water has off-flavors, then you might want to get a bottle of clear spring water. Recently I've switched to filtered tap water, to remove some of the rather grassy flavor that our water gets in summer.

The honey may be almost any cheap honey. Strongly flavored honeys (orange blossom, buckwheat, wild flower (in some areas)) generally work best. Clover honey works well, but very light honeys (like alfalfa) generally lack flavor. If making a true mead (without spices), the flavor of the honey is more important, and only strongly flavored honeys should be used.

The yeast is important. Baking yeast is bred for fast carbon dioxide production, and is not at all suitable for brewing. Some home cider makers may be used to just letting the sweet cider stand a few days to ferment on its own. This technique relies on the wild yeasts present in the air, on the cider press, and on the skins of the apples. It doesn't work for mead. The wild yeasts result in off-flavors, which the honey is not strong enough to mask. For strong, still meads (3 lbs honey/gallon or more) I use a white wine yeast, while for a lighter beverage I use ale yeast. A beer yeast should work as well as an ale yeast, but I find top-fermenting ale yeasts more fun to work with. WARNING: the "brewer's yeast" sold in health-food stores is dead yeast, it will not be usable for brewing.

The equipment you need is a large pot (I use a 20 quart canning pot), a 5 foot plastic tube to use as a siphon, and strong bottles. In addition, a 5 gallon water bottle with a stopper and fermentation lock is a very useful piece of equipment. Everything you use should be sterilized to prevent the growth of vinegar-forming bacteria. There are chemical sterilizing agents available

from wine-making supply stores, but I prefer to sterilize everything in boiling water. I'll mention sterilizing over and over. It is the single most important part of brewing mead rather than vinegar.

If making a still, wine-type mead, any sort of bottle will do for the final bottling. However, this recipe is for a fizzy "ale-type" mead, so strong bottles are essential. Champagne bottles and returnable pop bottles are usable, disposable bottles of any sort are not. I once had an apple juice bottle explode in my room, embedding shrapnel in my pillow from 9 feet away. Don't make the same mistake--use strong bottles!!

Steps to making the mead:

1. Boil the water, adding the tea and spices.
2. Remove water from heat and stir in honey. (Note, stirring implement should be sterilized!) Some mead brewers boil the honey in the water, skimming the scum as it forms. This removes some of the proteins from the honey, making it easier for the mead to clarify. However, I don't mind a bit of cloudiness, and prefer the taste of un-boiled honey. If you are making a wine mead, you can avoid the cloudiness simply by waiting an extra month or two for the mead to clarify. If you're buying a clear honey from a supermarket, it may already have been cooked a bit to remove pollen and sugar crystals, in which case, a bit more cooking probably won't change the flavor much. Digby's recipes do call for boiling the honey.
3. Cover the boiled water, and set it aside to cool (to blood temperature or cooler). This usually takes a long time, so I overlap it with the next step.
4. Make a yeast starter solution by boiling a cup of water and a tablespoon of honey (or sugar). Let it cool to blood heat (or all the way to room temperature) and add the yeast. Cover it and let it ferment overnight. The yeast should form a "bloom" on the surface of the liquid. (Of course, the cooling and fermenting should be done in the pan or other sterilized vessel.)
5. Add the yeast starter to the cooled liquid. Cover and let ferment. After a few days, it is useful to siphon the mead into another container, leaving the sediment behind. Here's where the 5 gallon bottle comes in handy. A fermentation lock provides a way to close the bottle so carbon dioxide can get out, but vinegar-forming bacteria and oxygen cannot get in. Remember to sterilize the bottle and the siphon first!
6. Ferment for a few weeks in a warm, dry place. When a lot of sediment has collected on the bottom of the bottle, siphon off the liquid (without disturbing the sediment). This process is known as "racking," and helps produce a clear, sediment-free mead. Again, make sure all your equipment is sterilized. A wine mead may need to be racked three or four times before the final bottling.
7. For a fizzy mead, siphon into strong (sterilized) bottles a bit before fermentation stops. With the strength given here 4 weeks is about right. The exact time depends a lot on the temperature, the yeast, the honey, I use plastic champagne corks to seal the bottles (sterilized, of course!). Crown caps are also good. Real corks should only be used for still beverages, since the amount of carbonation is unpredictable. Too much carbonation and you'll pop the corks, too little, and

corks are hard to remove from champagne bottles. Don't wire on the corks, unless you're willing to risk an occasional broken champagne bottle. Still meads should not be bottled until fermentation has completely stopped. I generally wait until the fermentation has stopped, and the mead has cleared. This can take more than six months for a strong wine mead.

8. Age the mead in a cool place. Note: ferment warm, and age cool. I sometimes keep the champagne bottles upright in the cardboard box they came in. That way, if a cork pops, there is something to absorb the overflow, and if, despite my care, a bottle breaks, it won't set off a chain reaction.

9. Drink and Enjoy! The light quick meads should be served chilled (like beer), while the wine types are better at room temperature or only slightly chilled.