

# **Making Homemade Wine**

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**Wines of the World I - Winter 2008**

**Holly Howell Section 01**



# Recipe

Yield: 6 gallons (23 L)

Ingredients:

48 lbs. (21.6 kg) Concord grapes

30 drops pectic enzyme liquid or appropriate equivalent of dry pectic enzyme for 6 gallon (23 L)

4.25 gallons (16.2 L) water

10 lbs. (4.5 kg) sugar

6 tsp. complete yeast nutrient

18 Campden tablets or 18 tsp. sulfite solution\*

1 package yeast (Lalvin 71B, Red Star Côte des Blancs or Champagne)

Sparkaloid or Kieselsol/Chitosan finings for clarifying

\* Sulfite is usually added before and after fermentation and again at racking. Typical dosage is one Campden tablet per gallon or, if using the sulfite solution, use 1 teaspoon liquid sulfite solution per gallon of must or wine.

To make a sulfite solution: To one cup of water add one ounce potassium metabisulfite. Stir to dissolve. Use one teaspoon sulfite solution for each gallon of juice or wine. (Store metabisulfite solution in a glass jar with the lid lined with plastic wrap to avoid interaction with the metal. Label the jar “sulfite solution for wine.” A “Mr. Yuk” sticker on the jar may be a good idea if there are children in the household. Store this solution away from little hands!

(See step four for the usage at the beginning of fermentation.)

Usage at the End of Fermentation:

Add six Campden tablets (crushed and dissolved in a small amount of water or wine) or 6 teaspoons sulfite solution at the end of fermentation.

Usage at the First Racking: Add six Campden tablets or 6 teaspoons sulfite solution.

Step by Step

1. Sanitize all of your winemaking equipment.
2. If you are working with grapes, remove all spoiled grapes from the clusters. Remove the stems. Crush the grapes. If desired, place the grapes in a mesh straining bag for easy pressing. Place the juice and grapes in a primary fermenter container.
3. Add 30 drops of pectic enzyme liquid to the juice (known as “must”). Stir to mix.
4. If you have purchased juice, ask the vendor how much sulfite was added at crush. If no sulfite was added, now is the time to dissolve six Campden tablets in a small amount of water or juice, or to stir 6 teaspoons of sulfite solution into to the juice.

Note: When in doubt, use a sulfite testing kit that measures sulfite levels in parts per million (ppm).

5. Test for sugar (°Brix) and acid (using a hydrometer and acid test kit, respectively). Add sugar to reach 22–23 °Brix (1.090–1.095 Specific Gravity). Stir thoroughly. A desirable acidity reading would be between 0.60–0.75.
6. Cover the must and wait 24 hours. If possible, keep in a cool area. If sediment is noticeable the next day, rack the juice away from the sediment using a siphon system (racking cane and food grade tubing). Discard the sediment to reduce the chance of developing off-odors .
7. Make a yeast starter. Hydrate the yeast (if dry yeast is used) by sprinkling over 1/2 cup (4 ounces) warm water (do not exceed 105 °F or 41 °C). Let stand for 5–10 minutes and stir.
8. Add yeast starter to the primary fermenter. Add the yeast nutrient. Stir. Cover lightly.
9. Stir at least twice a day for three or four days to keep the grape skins wet. Cover after each stirring.
10. When the hydrometer reading is 8 °Brix (Specific Gravity 1.030), press the grapes. Place the wine into a glass carboy (6 gallons/23 L). Attach an air lock and rubber bung to the carboy. The air lock should contain approximately 1 oz. (30 mL) of water to prevent air from entering the container.
11. Allow the wine to ferment to dryness. The hydrometer reading will be -1.5 °Brix or specific gravity 0.994 to 0.998. Sulfite the wine by adding six Campden tablets or 6 teaspoons of sulfite solution at the end of fermentation.
12. After a month to six weeks, rack the wine away from the sediment (known as lees) into a sanitized carboy. Add six Campden tablets (dissolved) or 6 teaspoons sulfite solution. Keep the wine in a cool area, if possible, to hasten the dropout of sediment. Reattach the airlock and rubber stopper on the carboy.
13. Add Sparkaloid (follow manufacturer's directions) to clarify the wine.
14. After another month to six weeks, rack the wine away from the lees and into a sanitized carboy. (Note: A 5-gallon carboy and a few small bottles may be used at this time to prevent air exposure to the wine.)  
The yeasty taste will most likely be gone after the second racking and the Concord flavors will become evident.
15. After another month to six weeks, rack wine one more time into a sanitized carboy.
16. Check acidity using an acid test kit. Adjust acid level, if needed. If more flavor is desired, a small amount of frozen Concord concentrate may be added (this will most likely sweeten the wine some, so add at your own discretion).
17. Taste the wine. If you wish to sweeten the wine, experiment with sweetening just a gallon of the wine by siphoning it from the carboy. Make a simple syrup solution by dissolving a measured amount of sugar in a small amount of warm water. Add the sugar solution to the gallon of wine and stir thoroughly. Wait 20-30 minutes. Taste and compare with the unsweetened wine. Increase sugar additions until you are satisfied with the residual sugar level. make sure you add the proper amount of Potassium Sorbate to inhibit fermentation of the sugar addition. To sweeten the remaining wine in the carboy, add the total sugar addition to each gallon of wine.
18. Check sulfite levels, adjusting if needed. Filter the wine, if needed.
19. Sanitize bottles and all equipment used for bottling.

Alexis Hartung is the co-owner of Country Wines in Pittsburgh and writes “Varietal Focus” in every issue of WineMaker.

## Equipment

(For one 3-gallon batch of wine)

From Mayers Cider Mill:

5 Gallons Concord Grape Juice

1 3-pack of Lalvin 71B yeast

From Beers of the World

3 gallon carboy

Rubber bung

Bubbler airlock

Hydrometer

Acid test kit

Campden Tablets (2 oz)

Pectic Enzyme Solution (4 oz)

Fermax Yeast Nutrient (1/2 oz)

C-Brite Cleanser (1 lb)

Oak Chips, lightly toasted

Band Thermometer

From Home Depot

5 Gallon bucket

6 feet tubing (3/8” outer 1/4” inner)

From Wegmans

Cinnamon sticks

Whole nutmeg

Cheesecloth

# Wine Blog Posts

(Wine making blog at: [wine.eric-decker.com](http://wine.eric-decker.com))

## **Getting ready...**

January 10th, 2008

I have all my equipment, a recipe, and a source to get juice from. The plan is to go up to Mayers Cider Mill on Saturday and pick up 5 gallons of concord grape juice. I decided on concord because, well, it's the cheapest and this is my first batch. Maybe when I get good I can move up towards the \$20/gal juices, but for now I'll stick more with the \$5 range. Plus, I think I had concord wine once before and I liked the fruity taste it had, so I'll give it a shot. One of the sites mentioned adding things to flavor it during primary fermentation, so I might add a few oak chips and a stick or two of cinnamon.

## **Primary Fermentation Started**

January 12th, 2008

Today I picked up my juice from Mayers Cider Mill in Webster, NY. I talked with Dave Bower Jr and he was of great help. I picked up a 5 gallon bag of concord grape juice for about \$6.75/gal. I have a 3 gallon carboy, so I have 2 gallons of juice left over, which I might add back in latter to give it a juice flavor (although with concord it should already be fruity) but I might just end up drinking it as juice. Or, maybe I just experiment and balloon a few bottles or something, I don't know, my roommate also suggested making candy from it.

Dave said that everything is ready to go with the juice, just need to add it to the primary fermenter and add yeast and nutrients. He suggested adding a little suga if I want to sweeten up the wine, so I did. I also added in a cheese cloth bag a handful of lightly toasted oak chips and two sticks of cinnamon. I added my activated yeast (Lalvin 71B) and three teaspoons of nutrients, gave it a stir and covered it up with a towel. My cat Amelie seems to like buckets, so I had to cover it with a plastic crate to keep out the 'natural cat flavor' if you know what I mean.

As of now, the temperature of the juice is at 56°, and the SG was 1.05 and acidity was 0.55.

## **Yeast Active**

January 14th, 2008

It's been about two days now, and things are really getting going. There's a nice foam at the top of my bucket, and my last specific gravity reading was 1.04, down from 1.05 last night. I'm a little worried about the sugar level though. The person I spoke with at Mayers said that the juice was all ready to go - just add yeast and nutrients, and I trust

him 100%, but it's just weird that most recipes start with a reading of 1.09 and then let it drop. Then again, I am making it from already started juice, since it must have sat for a while on the skins since it is so deep in color. So I assume that the sugar was higher then, and it's dropped some. He said I could add about 1 lb for the whole 5 gallon bag if I wanted a sweeter wine, so I'm, pretty sure that it will come out fine.

### **Primary Fermentation Finished**

January 14th, 2008

I got back from my glass blowing class tonight and did a test of my wine. The specific gravity was at least 1.03 – it might be lower by the hydrometer hit the bottom of my bucket. So I've transferred it to a 3 gallon carboy and added a bung and airlock, and it's all ready to go. It is actually already bubbling, I think because it is really warm where it was, the thermometer on the side of the bucket was reading 74° or higher. So I've moved it to a cooler part of the basement where it will sit for the next few weeks and bubble away.

### **Wine Update 1/20**

January 20th, 2008

The wine has stopped bubbling as of a few days ago, or at least it is not a constant bubble like it was when it was first put into the carboy. I took the two extra gallons of juice, added 1 gallon of fruit concentrate ("cranberry concentrate" which is really apple, grape, pear, cranberry, some other berries, basically a fruit punch). I decided to punch up the specific gravity, so I added about 3 pounds of sugar and brought the levels up from 1.05 to 1.095 so it should be drier and sweeter than the first one. I did the same seasoning – the oak chips and cinnamon – but I also added a cardamom seed and nutmeg nut. I put that into a carboy today, and we'll see how the two compare in a couple of months. Just for kicks I also have a one gallon milk jug with peach juice concentrate (another fruit punch in reality) getting ready to go.

### **Wine Update 1/26**

January 26th, 2008

Looks like everything has calmed down a bit, there's no more bubbling or foam at the top. Now it's just time to let it sit and get tasty.

### **Peach Wine Experiment**

January 29th, 2008

Well I just had to try something different. I couldn't just sit still and not ferment *something*. I'm just in that mood now. So I read that you can ferment juice that you get in concentrate from the grocery store. Like one of my wines that is 1/3 'cranberry' concentrate, I wanted to try another type of juice, so I made a gallon of 'peach' juice. Of

course the main ingredients are not peach juice, but rather grape, apple, pear, whatever, but it's still juice. So I made up a fermenter out of a milk jug. Since this is more of a white wine, I let it run its primary fermentation in a cooler area, so it took a week and a half. I also raised the specific gravity to 1.10 and let it descend to 0.29. It's acidity is also in the range for white wine, at 1.2 ppt.

To make an airlock, I tried to make a bubbler. It's just an empty spice container tapped to the side filled with water. There is plastic wrap over the top, and a hose running from the capped milkjug, through the plastic 'membrane' and into the water. So it should work in theory, since only the CO2 can escape and nothing can enter the tube due to pressure inside the jug. So far it looks good, I plugged it on today and started it on the 20th. It will be interesting to see if the bubbler works and if so, how the super simple peach wine tastes. (I did not add anything to this one, such as oak or cinnamon.)

### **Presenting: 2007 Decker's Homemade Concord Nuevo**

February 9th, 2008

In the next day or two I'm going to take out a little wine to taste it and turn it in for my Wines of the World class. I've decided to name the wine Decker's Homemade Concord Nuevo for a mixture of three reasons. One is a technical wine term. There is a type of wine from the Beaujolais region in France which is classified as 'Beaujolais Nouveau' which is wine that is quickly fermented and bottled and shipped, but not aged. (Nouveau simply translates to 'new' in case you didn't recognize it). The second reason for this name is from a Design angle. Often I use, and love, the font Helvetica Neue. It's a beautiful typeface. And again, there's the neue. Finally, I didn't want to call it 'Concord Nouveau' because it's not from France and it is made with North American native grapes. And I didn't just want to call it neue, because that sounds more or less just like "new." So, since I did take something like six years of Spanish I went with nuevo.

So in a few days I'll take a sample. I want to bottle a few, but I need a corker first, as well as another carboy to transfer the rest of the wine into, since I only want to make a few 'nouveau' wines to bring home over break. The rest will age some more to get rid of the yeasty flavor. But you know what, I like the name so much that I'll keep it, so this batch will be designated as 'quick ferment reserve.'

# Wine Logs

## **Jug #1 (100% Concord Juice)** started Jan. 12th

Date	Time	Specific Gravity	Temp	Notes
1/12/08	2:30 PM	1.05	56°	Added oak, cinnamon, .55 TA
1/12/08	11:30 PM	1.05	62°	
1/13/08	10:30 AM	1.05	66°	
1/13/08	11:00 PM	1.049	68°	Foamy
1/14/08	11:15 AM	1.04	72°	Foamy
1/14/08	10:00 PM	1.03	74°	Hydrometer hit bottom

## **Jug #2 (66% Concord, 33% 'cranberry' concentrate)** started Jan. 16th

Date	Time	Specific Gravity	Temp	Notes
1/16/08	10:00 PM	1.095	64°	
1/17/08	9:00 AM	1.095	66°	
1/17/08	8:30 PM	1.09	66°	Foamy
1/18/08	8:30 AM	1.085	69°	Very foamy!
1/18/08	5:30 PM	1.08	70°	No more foam, but fizzy
1/18/08	9:00 PM	1.075	70°	Still fizzy, no foam
1/19/08	11:00 AM	1.05	72°	Bubbly
1/19/08	8:45 PM	1.04	72°	Bubbly
1/20/08	10:00 AM	1.03	72°	

# Images

Photos & label



finger lakes, NY

concord quick ferment reserve nuevo

2007

DECKER'S HOMEMADE

## References

These might be of use for people who want to try this.

**Wine recipe from WineMaker magazine:**

<http://winemakermag.com/departments/367.html>

**Some good pointers at:**

<http://winemaking.jackkeller.net/reques10.asp>

**Mayers Cider Mill is a great place to get wine and help:**

<http://www.mayerscidermill.com>