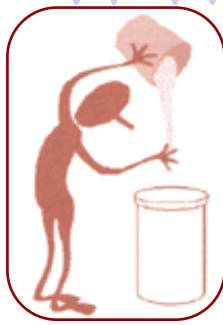


Make Your Own Wine

Wine is essentially fermented grape juice. Before discussing the particulars of wine, we need to understand what fermentation is. All around us, in the air and water, are thousands of one-celled organisms, among them a group called yeasts. The one we use for making wine is called *Saccharomyces cerevisiae*. Yeasts are single-celled organism that just love to eat sugar. In Italy, traditional winemakers (read: “non-commercial”) often let the yeast that colonizes the outside of the grapes do the fermenting work, but commercial vintners use a chemical called potassium metabisulfite to kill or stun the wild yeast. Small producers often feel like this is interfering in a natural process, but wild yeasts often can't tolerate alcohol percentages higher than nine or ten, and wines this weak are more susceptible to infections. There is also the danger that another kind of yeast (one of the *Acetobacter* genus), will eat the alcohol and produce vinegar (actually a mixture of water and acetic acid, $C_2H_4O_2$). Note that the Italian word for vinegar, *aceto*, is at the beginning of this word. As with you or I, eating means elimination; the yeast, having sated themselves on sugar, eliminate two waste products, carbon dioxide gas (CO_2) and ethanol (ethyl alcohol – C_2H_6O). The second of these waste products is the one we want. The yeast continue merrily along eating and eliminating until, having raised the alcohol content of their aqueous environment too high, they die from having polluted their little world (an apt metaphor for us). This sheet will give you the basics of wine-making so you can make our own bottle of wine.



1. The first step in winemaking is to clean all the equipment with hot water and then to crush the white grapes. When one makes red wine, the skins need to stay in contact with the *must* (freshly-pressed grape juice), but with white we only need the must. Depending on the grapes, you'll need a little more than 2kg of grapes to make 750mL of wine. This might be too much, but it's better to have too much must than not enough. You'll have to be creative in crushing your grapes. Try using a colandar lined with cheesecloth. In Perugia this can be purchased at Conti on Piazza Matteotti - ask for a half meter of *garza per fare il formaggio*.

2. Don't worry about the why right now, but make enough must to fill a clean, white 750mL glass bottle and a 500mL plastic water bottle both about 2/3 full.

3. You likely don't have potassium metabisulfite (Campden) tablets or commercial wine yeast, but if you feel like doing it the right way, or you feel that you might try making more wine, buy these through the Internet. Dissolve the right amount in a small cup of water and dump them into the must, then cap both bottles and leave the must for a day. The next day, dissolve the yeast in a small cup of lukewarm water and add half to one bottle, half to the other.



4. If you don't have the tablets and yeast, skip the step above. Leave your bottles open and natural yeast will colonize the must and begin to convert the sugar to alcohol. Foam will start to rise as carbon dioxide bubbles out of solution. After three



days you'll want to put in an airlock. Go to the hardware store in Via Ulisse Rocchi and buy a meter of plastic tubing (the small stuff). Bend and clamp it in a U shape, being careful not to crimp the loop (don't cut it until you've taped it and there are no crimps). Now put a bit of water and just a drop of bleach into the U. This will keep unwanted yeast out of your must. Be creative and figure out how to seal this airlock in. Buy a small tube of silicone (not the big one pictured here) and some cotton swabs (*ovatta*); stuff the cotton around the tube and silicone it into the bottle. You'll have to make another one for the smaller bottle, too.

5. Your must will bubble away, gradually turning into yeast and clarifying. The “dregs” or “lees” will settle out to the bottom of the bottles, forming an ugly mass. This is dead yeast cells and small pieces of grape. After two weeks

or so, you can use the other 90cm of tubing to decant the wine off the dregs. Carefully, without stirring it, place your bottles on a table and an empty bottle below. Remove the airlock and cotton. Slide the tube down into the wine, and gently suck on the other end of the tube to get the siphon flowing. Quickly put the lower end of the tube into the empty bottle and adjust the upper end to drain the wine out. Don't worry about getting every last drop - we're more interested in leaving the dregs behind. Use the wine in the smaller bottle to fill your bottle almost up to the top, at least halfway up the neck.



6. Put the airlock back in with fresh silicone. Let your wine settle again for a few weeks, then repeat the decanting process to get the last bit of dregs out. You may have to suck it up and buy some corks from a hardware store because it will be difficult to get a used cork into your bottle. White wine will improve for a year after it's made and then will go downhill after three years.

Interested in trying grappa or distilling in general? Look at the site www.amazingstill.com for a free, downloadable pdf that explains how to make an inexpensive still for distilling.



www.thelittleblue.it

