

MAKING HERITAGE APPLE CIDER IN THE FRENCH STYLE



How to Make Apple Cider - Heritage French Style

French ciders are similar to English ciders. They are made from medium to high tannin crab apples. They tend to be noticeably sweet to balance the tannic astringency, from 2% residual sugar to above 4%, and tend to have an appreciable fruit character to them. This can be the result of backsweeting the ciders with fresh juice. Traditionally, this is the result of the French technique of *defécation* or *keiving*. Enzymes are added to the juice to minimize its nutrient content, and no nutrient additions are made. This slows the fermentation and makes it easier to stop the fermentation before all the sugars have been fermented. Less vigorous fermentation means that less aroma is driven away by the production of CO₂. This results in greater retention of the fruit's native character. Carbonation is commonly between beer carbonation to champagne-like, ranging between 2.6 and about 6 volumes of CO₂, respectively.

They tend to be rather sweet, full-bodied and rich. The acidity will be lower than New World style due to malolactic fermentation which reduces the dominant malic acid into less acidic lactic acid. The spicy, smokey, farmhouse character of MLF in the presence of tannins is most common, but is not required. Just as with English ciders, MLF character should not be pronounced and actually should be milder than most English ciders. The tannic character should be moderate, but mostly as astringency providing mouthfeel, not as bitterness. Common apple varieties include Nehou, Muscadet de Dieppe, Reine des Pommes, and Michelin. Alcohol content tends to be low due to the practice of stalling the fermentation and leaving some sugars unfermented. ABV is usually between 3 to 6%, with starting sugars between 12 and 16 Brix, and ending sugars between 2 and 5 Brix.

To make French-style ciders, use high tannin crab apples. French style-ciders should have a noticeable astringency to them. If you don't have access to high tannin crab apples or are using store-bought juice, use what you have and make up for the tannins by adding them back in the form of Stellartan G Grape Tannin. Residual sweetness as well

as astringency from tannins are key. To reduce the nutrient content before fermentation, consider treating the juice with ClarilSP, a mixed fining agent which will settle out an assortment of solids and allow you start the ferment with very clean, nutrient reduced juice. Ferment with yeasts that don't have a high vigor and will ferment slower, such as Epernay II. Also, keep fermentations cooler if you can, fermenting your cider at the low end of the yeast's temperature rating. Yeasts that produce estery aromas should be used to help enhance the fruity character. The best choice at The Beverage People would be Epernay II wine yeast, a common choice for rosé wines which has a reputation for being relatively easy to stop before it ferments dry. To stop the fermentation early, a notoriously tricky practice, bring the temperature of the fermentation down below the range of the yeast. This should be as cold as possible, preferably refrigeration temperatures. After a couple days of "cold crashing", transfer the cider off of the yeast sediment carefully and cleanly, leaving the stalled yeast behind. You should do this once the brix have reduced to about 5 brix or less.

To get the spicy, smokey, farmhouse character of MLF add malo-lactic bacteria cultures to your cider after primary fermentation is complete. MLF must occur in the presence of tannins, so tannins should be added to the juice before MLF. For more information on adding tannins refer to our [Key Components in Cider discussion](#). [The Beverage People carries malo-lactic bacteria cultures from three different companies from 5 gallon packets to 66 gallon.](#) MLF character should be less pronounced in French-style ciders. Allow MLF to proceed until desired amount of MLF character is in the cider. Then attempt to arrest MLF with a combination of cold temperatures, sulfite, and [Bactiless fining agent](#)---again, cold crashing will be useful since MLF bacteria prefer temperature between 65 and 80 degrees F. If you put the cider in the fridge for two weeks, the MLF bacteria should go dormant. Adding sulfite should help inhibit or kill the MLF bacterial. [Bactiless](#) is a product used to prevent or stop bacterial fermentation. The combination of those three factors should halt MLF.

French ciders were traditionally sometimes aged in neutral, used wine barrels. Compared to English-style, however, the French ciders would not be aged as long and would not show as much character development from the wood.

For carbonation, we recommend kegging this type of cider. Due to the presence of high residual sugar, you should add potassium sorbate at a rate of 0.25 oz per 5 gal. to prevent the yeast from re-fermenting. Sulfite the cider to prevent continued bacterial fermentation. Then keg, chill, and carbonate the cider. Carbonate to between 2.6 and 6 volumes. If you want it bottled, you can transfer from keg to bottle with a [counter pressure bottle filler](#), and you will have a shelf stable French-style cidre!

Instructions

1. Crush the apples. Use tannic crab apples if you can. Sort out spoiled fruit.
2. The crushed pulp should be sulfited right away. If your fruit is in good condition, add no more than 1/2 [Campden Tablet](#) per gallon of crushed fruit (32 parts per million SO₂). Higher sulfite levels will inhibit a successful malolactic fermentation later in the process.
3. Stir in [Pectinase](#) powder. to help increase the juice yield. Use 1/2 ounce for every 5 gallons. Wait 2-4 hours before pressing for the pectinase to break down the pulp which increases the amount of juice that can be extracted. It will also aid in clarifying the cider to achieve a clear, bright cider.
4. Press the pulp to separate the juice from the skins and other solids. Funnel the collected juice into narrow-neck containers that can accept an airlock. Stir in [Claril SP](#) powder to facilitate clarification. Use 15 grams per 5 gallons. Top up the storage vessels to reduce air space. Put the juice under refrigeration and wait 24-48 hours.

- 5.*If your apples are culinary apples rather than French varieties, add tannin such as StellarTan G Grape tannin to increase the tannin content of the juice. For instructions, refer to our [Key Components in Cider discussion](#).
- 6.Remove a sample of the juice to test for total acidity (TA). Follow the instructions in your acid testing kit. If the acidity is less than .65%, add enough [tartaric acid](#) to bring it to this level. If you cannot do the test right away, refrigerate the juice and run the test later.
- 7.Now test the sugar content of the juice with your hydrometer. Correct any deficiencies by adding enough sugar to bring the reading up to 12-16% sugar (12-16° brix).
- 8.After the 24-48 hour settling period, transfer the clear juice into narrow-neck containers that can accept an airlock, leaving the sediment behind. Only fill them three-quarters full.
- 9.Add your Yeast by sprinkling on the surface. A good choice of yeast would be [Epernay II wine yeast](#) for it's fruity ester profile and slow vigor. Attach an airlock or breather bung, and allow fermentation to proceed. Do not use nutrients to feed the yeast because you will need to stop the fermentation before completion. If you can, maintain fermentation temperatures that are on the lower end of the temperature range for the yeast you are using. For example, if the fermentation temperature range of the yeast is 60° - 75°F, using fermentation temperatures around 60° - 62°F will ensure that less aromatics are driven off with the CO₂ production.
- 10.When visible signs of fermentation end - the foam flattens and the hazy appearance begins to clarify - the cider must be removed from the sediment. Use a siphon to transfer the cider to a sanitized glass, PET plastic or stainless steel storage containers that accept an airlock. Fill your container all the way into the narrow part of the neck without touching the stopper. Close the top with a stopper and airlock.
- 11.Add a malolactic bacteria culture and maintain temperatures at 65-80 degrees F. Usually it takes 3-6 weeks for a successful conversion of malic to lactic acid. We sell [different cultures for different size batches and conditions](#). Review our discussion of the "[Mysteries of Malolactic](#)" for help in determining whether you have successfully completed the conversion. Note, however, that in French-style cider, the MLF (malolactic fermentation) character is generally less than in an English style. Taste the cider as it develops. If you choose to stop the MLF early, proceed as follows. Put the cider in the fridge for two weeks, the MLF bacteria should go dormant. Add sulfites up to 50 ppm (Camben tablets up to 4 in 5 gallons) should help inhibit or kill the MLF bacterial. [Bactiless fining agent](#) can be added to help stop bacterial fermentation, but remember you will need to transfer off of the Bactiless after 10 days. The combination of those three factors should halt MLF.
- 12.When you have determined that MLF (malolactic fermentation) has completed, rack your cider to a new vessel. Ensure it is topped up and, if you have not already done so in step 11, again add 1/2 [Campden Tablet](#) per gallon (32 parts per million SO₂).
- 13.Store for two or three months.
- 14.Carefully rack away from the sediment. If your cider is going into extended bottle storage, add another half [Campden Tablet](#) per gallon (32 parts per million SO₂). Beverages such as this may often be enjoyed within two months of bottling. If you plan to drink some that soon, don't add additional sulfite to that portion at bottling time.
- 15.For carbonation, we recommend kegging this type of cider. Due to the presence of high residual sugar, you should add [Potassium Sorbate](#) at a rate of 0.25 oz per 5 gal. to prevent the yeast from re-fermenting. Sulfite the cider to prevent continued bacterial fermentation. Then keg, chill, and carbonate the cider. Carbonate to between 2.6 and 6 volumes. If you want it bottled, you can transfer from keg to bottle with a counter pressure bottle filler, and you will have a shelf stable French-style cidre!