Instructions on how to make hard cider

Brewing hard cider from nonalcoholic, or “sweet” cider is a simple process, and the inebriating end product is as delicious as it is discombobulating. Here are the steps you'll follow to make hard cider of your own. Click here if you're looking for instructions on crushing your own apples to make cider.

Here is a checklist of everything you will need to make hard cider:

### Brewing Equipment

- **Stainless Steel or Enameled Pot**
- **Stainless steel or plastic spoon**
- **One 6.5 Gallon plastic fermenter with lid, and airlock**
- **Optional but highly recommended:**
  - 5 Gallon Glass Carboy with a stopper and airlock
- **Half-gallon glass “growler” jug or other bottles (including caps or corks)** to store the finished cider

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*Photo by Johann Rela*
Hard Cider Ingredients

5 gallons of preservative-free, sweet apple cider, preferably unpasteurized

One packet of wine yeast (Lalvin 71B, Red Star Champagne or Red Star Cote des Blancs are good choices) OR one packet of Cooper’s Ale Yeast OR one liquid yeast. Both White Labs and Wyeast make excellent cider yeast strains.

Optional for higher alcohol content: 2 pounds of brown sugar or honey

• Optional for creating a starter: one additional 16-ounce bottle of preservative-free, pasteurized apple juice

• Optional for sparkling cider: 3/4 cup honey or brown sugar

Find the Ingredients

Choose Your Juice. The best hard cider is made from sweet apple cider fresh from the cider press — whether your own, or a local cider mill’s. If you’re buying sweet cider, start by checking the label to be sure the cider doesn’t contain chemical preservatives, because these will kill your yeast and your cider will not ferment. (The cider is chemically preserved if sodium benzoate or potassium sorbate are listed on the label.) Your best bet for preservative-free cider is to buy it in season from a local orchard. In a pinch, you can also make hard cider with grocery store apple juice, as long as it doesn’t have preservatives.

Also, be aware that most commercial cidermakers are required to pasteurize their cider, and the process they use will affect the flavor. Preferably, your sweet cider should be “cold pasteurized,” which kills microorganisms with ultraviolet light. The usual method of pasteurization kills microorganisms with heat, which affects the flavor of the juice. If you’re not sure which method a local cider mill uses, it doesn’t hurt to ask.

Choose Your Yeast. A variety of dry and liquid brewing yeasts will do the trick, and you can find them here. Although you can buy specialized liquid yeast packs for fermenting cider, dry wine yeasts do an excellent job and are much cheaper.

Make a Starter. The day before you brew your cider, make a starter. This step is optional, but it ensures that your yeast is proofed (i.e., alive) and will start fermenting your cider right away. To make a starter, open the bottle of room-temperature preservative-free apple juice and pour out a few ounces. Pour the contents of one yeast packet into the bottle, reseal it and shake for a few seconds. Within five or six hours, you should see a bit of bubbling within the bottle. Once you do, release the pressure within the bottle, reseal it and put it in the refrigerator. Get it out a couple of hours before you brew.
Start Brewing

On brewing day, if your juice is unpasteurized, pour your cider into the brewpot and simmer it over medium heat, keeping the temperature at about 185°F for about 45 minutes. This will kill most of the wild yeasts and bacteria in the cider. Bolder cidermakers will forgo this step by pouring the sweet cider directly into a plastic bucket and then pitching in the yeast. If you follow this strategy, wild strains of yeast will still be in the sweet cider when it begins fermenting. This will alter the flavor of the cider. (It may or may not improve it.) If you do heat the cider, don’t let it boil! Boiling causes pectins to set, which creates a permanently hazy beverage. While simmering the cider, you can add the optional 2 pounds of brown sugar or honey. This will boost the fermentable sugar content in your cider and up the alcohol content.

Next, pour the cider into a sanitized fermentation bucket — an unsanitized bucket may spoil the cider. Follow the instructions on your bottle of sanitizer. Let the cider cool to nearly room temperature, then add your yeast — or starter, if you chose to make one. Stir the mixture for a minute or two with a clean stainless steel or plastic spoon to aerate, then seal the lid and affix the airlock. Place the bucket in a room or closet where the temperature is 65 to 75 degrees — the closer to 65 degrees, the better. Stay within this range if you can: At lower temperatures the cider won’t ferment, while higher temperatures will speed up fermentation, but may also change the flavor.

Let it Ferment. Within a day or two you should see the airlock start to bubble. The gas it’s releasing is carbon dioxide, a byproduct of the fermentation process. Congratulations, your soft cider is on its way to becoming a delicious, inebriating elixir of the gods! This bubbling should subside within two weeks, signifying an end to the primary fermentation. After that, let the cider sit another week to allow the yeast to settle out.

Options For Bottling

Option 1: Bottle the Cider Now. If you want to bottle the cider immediately, affix the rinsed food-grade tubing to the spigot on your bottling bucket and pour the cider off into sanitized jugs or bottles. (Be gentle when moving the bucket full of cider. Sloshing can disturb the yeast sediment at the bottom of the bucket and cloud up your cider.) Seal the jugs or bottles. Let the bottled hard cider sit for another two weeks and then it will be ready to drink. Your cider will probably be “still” (i.e., not fizzy) unless you let it age for several months. Hard cider is more like wine than beer, and the flavor will improve as it ages.

Option 2: Let it Clarify. If you only use one fermenter, your cider will taste fine, but may not be perfectly clear because it will probably still have some suspended yeast. To reduce cloudiness, siphon your cider into a glass carboy. Sanitize the carboy before filling it with cider. Once you’ve siphoned your cider into the carboy, put a sanitized stopper and airlock on it and place it back in a dark and, preferably, cool location. A month should be ample time for the cider to clarify. After it’s aged for as long as you can stand, bottle it as above. This cider will most definitely be “still,” with no bubbles.

Option 3: Make Sparkling Cider. Regardless of whether you decide to bottle immediately or let it clarify in a carboy, if you want “sparkling” cider, you’ll have to add a couple steps at bottling time. First, boil 1 cup water with three-fourths cup honey or brown sugar. Pour this mixture into a sanitized bottling bucket. Then, siphon your cider over from your fermentation bucket or carboy to the bottling bucket. The honey or brown sugar syrup and cider should mix together naturally, but stir slowly with a sanitized spoon if you feel it is necessary. Then, bottle as you would normally. You’ll have to let this sit a bit longer than the still cider, so the residual yeast will have time to ferment the sugar you added and carbonate the cider inside the bottle. Usually, 2 weeks is enough.

Drink the Cider! At this point, it’s time to start drinking your cider and thinking about brewing your next batch. With time and experience, your skills will grow and your recipes will become more complex. Soon, you’ll be making cider that delights your friends and terrifies your enemies.