



How to Make Cider

The new old-fashioned beverage that you can make at home.

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For most of us the thought of cider conjures cozy memories of brisk autumn days and evenings by the fireside, Christmas caroling and mugs of spicy, steaming apple juice cupped in mittened hands. To the rest of the world, "cider" means an alcoholic treat. Whichever sort of cider you prefer, chances are you can make it at home.

What exactly is cider? The freshly-pressed product we call cider is elsewhere called apple juice. What Americans refer to as "hard cider" is simply "cider" in Canada and abroad, where non-alcoholic cider is called "sweet cider." Traditionally, both beverages are pure pressed apples and nothing more; no added yeasts, sugars, preservatives or flavorings, just unadulterated apples. However, today's commercial ciders, sweet and hard, are sometimes doctored to hasten fermentation and yield a safer and more consistent product. (We'll cover that later.)

American hard cider is generally 4 to 8 percent alcohol; British commercial ciders run 8.5 percent. Farmhouse ciders made for home consumption may go 10 to 11 percent (although sweetener-added ciders between 8 and 14 percent are technically apple wine).

Spaniards call hard apple cider "sidra," Germans, "apfelweinn." In Brittany and Normandy it's "cidre." To Australians, hard cider is cider; sweet cider is spelled "cyder." In Britain, low-grade hard cider is "scrumpy," the name derived from the slang verb "to scrump," meaning to swipe fruit from an orchard; old-timers sometimes called it "squeal pig cider" because of the sound tipplers made when sampling it unaware. Cider cut with lager becomes "snakebite," with rum, "stonewall." Distilled cider and whiskey blend are "cider royal." Other distilled ciders are "apple brandy," "applejack" and "gumtion." A lot of names for fancy apple juice, you say? Yes, indeed. But cider has been around a very long time and it's a historically significant drink.

Cider Through the Ages

No one is certain when cider was first created, but when Julius Caesar's legionnaires stormed through England in 55 A.D., they found rustics sipping fermented apple brew. By the 9th century A.D. cider making was well established throughout Europe. After the Norman Conquest (1066 A.D.) it became the drink du jour in Great Britain. Vast cider apple orchards were established throughout the realm. The Middle Ages found monks pressing and peddling large quantities of apple spirits. English cider making probably peaked around the mid-1600s; when country folk migrated to the cities as part of the Industrial Revolution, cider's popularity began to wane. Yet in 1896, in evidence presented to the Royal Commission on Agriculture, Mr. Sampson of the National Association of English Cidermakers estimated Britain's annual cider consumption at 55.75 million gallons. That's a lot of fermented apple juice!

Picture this... You're homesteading one of the new American colonies. Your well is a shallow, hand dug affair or you tote water from a nearby creek or river. It's often not fit to drink. The cow (if you're lucky enough to own one) doesn't give milk year-round and her milk may be iffy at best. But apples, those you have. You or your parents or someone along the line packed seeds when they sailed the sea to this new land, so you have a fine cider orchard out back of the cabin. Cider tastes grand, it doesn't go bad, and unlike that nasty water, fermented apple cider doesn't make anyone ill—or dead.

By 1686, one Virginia Colony orchard boasted 2,500 trees. In 1767, Massachusetts Colony's hard cider consumption was estimated at 1.14 barrels per capita annually. Everyone drank hard cider with meals: toddlers, Grandma, the parson and the barmaid. And "barrel" was a unit of measure, not a generality. A barrel held 36 Imperial gallons; that's 49.25 gallons of hooch for every man, woman and child in the Virginia Colony for a year.

Cider became the All-American drink. George Washington and John Adams were extremely fond of cider; the latter quaffed a tankard of hard cider every morning before breakfast—to soothe his stomach and quell flatulence, he said.

Between 1845 and 1918, the Temperance Movement dealt cider making a dastardly blow. Fired by speeches from the pulpit, many farmers abandoned or destroyed their evil cider orchards; usually only sweet cider apple trees were spared.

Still, in 1900 an estimated 55 million gallons of hard cider were consumed by thirsty Americans; by 1919, only 13 million gallons. That year's Volstead Act, the 18th Amendment to the Constitution of the United States that solidified prohibition enforcement, effectively illegalized the sale and consumption of alcoholic beverages—including hard cider. By December



5, 1933, when it was repealed, most Americans had forgotten their old friend, cider.

Maginc Ingredient: Cider Apples

As microbrewery beer is to Coors and Budweiser, today's artisan ciders are to mass-produced ciders. Like Budweiser, commercial hard ciders have a following and rightfully so, but artisan hard ciders (also called craft ciders) are in a class of their own. They are hand-pressed using organic or near-organic heirloom cider apples—real cider apples—in small batches at 50 or so cideries, mostly in New England and Oregon.

Unlike large production hard ciders brewed of apple juice concentrates or blends of concentrates and real apples, sometimes with commercial yeasts, preservatives and sugars added, artisan ciders are apples and nothing but. And they're apples of the very best kinds. For hard cider that means somewhat puny, rock-hard specialty apples whose high concentrations of malic acid and thick skins packed with tannins (the puckery, bitter substance in acorns) makes them downright repulsive to munch. Yet tannin adds body to hard cider, while malic acids add flavor and tartness. Concentrations of natural sugars, fermented, spur alcohol production.

Cider apples aren't the sort you'll find in stores. Most are antique apples. Their names are highly evocative: Blood Butcher, Cider Lady's Finger, Fillbarrel, and Slack-Me-Girdle (now extinct). Thanks to Temperance crusaders' eager axes, few elderly cider apple trees grace American orchards, but specialty nurseries are selling them again.

Cider apples fall into one of four groups, depending on their acidity (malic acid content) and tannins. These are: sharps, bittersharps, bittersweets and sweets.

A blend of three or more varieties is generally pressed together when crafting fine hard cider, but a few choice apples make a toothsome stand-alone vintage brew. A traditional mixture is one-third each of sweet, bittersweet and sharp apples. However, most artisan cider makers develop their own favorite blends.

Most sweet apples are general-purpose varieties, rather than cider-specific types. American sweet cider is mainly pressed using apples from this group. It's said more American cider has been pressed from sweet Golden Russets (also a fine eating, drying and cooking apple) than any other fruit.

Anyone living in USDA zones 5 to 9 can grow cider apples. Orchardists two zones farther north or one south can press new or antique all-purpose sweets and sharps. Crabapples, many of which flourish in zones 3 and 10, make acceptable bittersharp apples.

Sweet Cider in a Nutshell

If you have apples, you can have sweet cider, it's that simple. If you live in apple country, check around; folks who press cider often do custom pressings. Make certain their equipment and process is safe and sanitary before hiring them.

Safe? Years ago when most cider was hard, safety was less of an issue; long fermentation effectively zapped troublesome bacteria. Today's sweet cider? Not so. E. coli, Salmonella, Cryptosporidiosis, and a toxin called Patulin thrive in infected unpasteurized, unfermented cider and all cause serious food-borne illnesses.

How to prevent these nasties?

Never press windfalls (drops), wormy, moldy or overripe fruit. E. coli is introduced by fruit contaminated with bird or animal feces; rotten, moldy apples are troublesome too. Besides being potentially unsafe, they effect cider taste, color and keeping qualities, too. Undersized, misshapen, or slightly blemished fully ripened apples work fine; compost the others.

Vinegar Resources

Making vinegar can be simple or quite complex. To get a handle on the process, digest these fine resources.

"Making Cider Vinegar at Home" (Ohio State University)

<http://ohioline.osu.edu/hyg-fact/5000/5346.html>

Vinegar: The User Friendly Standard Text, Reference and Guide to Appreciating, Making, and Enjoying Vinegar by Lawrence Diggs (Quiet Storm Trading; 1996) Wash apples very thoroughly. Dump them in a warm, weak bleach solution (one ounce of commercial 5 percent household bleach to each gallon of water) and briskly scrub each one with a sanitary brush. Rinse before pressing.

Sanitize equipment immediately before use with the same sort of chlorine solution. Rinse thoroughly; twice.



Consider pasteurizing fresh-pressed sweet cider, especially if children, older folks, or anyone having a compromised immune system might drink it. Using a cooking thermometer, heat cider to 160 to 170 degrees F, skim any foam that forms, and pour cider into sanitized, heated glass jars or plastic freezer containers. Immediately refrigerate and drink fresh cider within a week or so, or freeze it for up to one year.

Sweet cider making processes vary considerably, depending on the equipment you have at hand. No cider press? The University of Georgia's "Making Apple Cider" at www.fcs.uga.edu/pubs/PDF/FDNS-E-91.pdf leaflet describes making it with standard kitchen utensils. If you own a home cider press or want to cob one together to try your hand at pressing apples, "Apple Cider Recipe" at www.allsands.com/Food/Recipes/appleciderreci_tsm_gn.htm is an even better bet (instructions are included).

How to Make Cider

The cider making process is fairly simple; here's what to do:

Wash your hands then grade and scrub your apples. Sanitize all equipment, including utensils and containers, then thoroughly wash your hands again.

Grind the apples to a fine pulp (called pomace). This initiates cellular breakdown and releases the juices inside. The finer the pulp, the more juice will be extracted and (usually) the darker and cloudier the cider.

Load the pulp into a porous fabric bag (thus forming a "cheese") and press it. The juice/cider expressed is properly called "must." Depending on the varieties and equipment used, expect to extract three to six gallons of cider per bushel of apples. Pasteurize and store your cider or filter it to remove large solids and chill it in the refrigerator for up to 24 hours to allow sedimentation to occur, then bottle or freeze it.

Hard cider making progresses from this point and it's a varied, yet exacting, art. Neophyte hard cider makers are wise to peruse as many resources as they can.

Basically, fresh-pressed must is poured into fermentation casks or vats (wooden barrels are traditional and best, but stainless steel or plastic works too; cider cannot be stored in aluminum, iron or copper) and stored at 60 to 70 degrees F for two to three months.

During this time natural wild yeasts convert apple sugar into alcohol. When a desired level of dryness is reached, the cider is decanted, casks or vats are cleaned, and the cider poured back into them and stored at 40 to 60 degrees F for six months to a year or more to further age.

Homemade Cider Vinegar

Another value-added product in sizzling demand is organic apple cider vinegar. Even if you don't make it to sell, if you have extra apple cider why not craft homemade vinegar too?

In fact, you can have your vinegar without growing apples; high quality, unpasteurized, store-bought cider makes fine homemade vinegar. The key words are "high quality." Sweet cider past its prime becomes vinegar, as does hard cider gone awry during the cider making process. But quality it's not. Let's consider the better kind.

Like cider, vinegar is an ancient comestible. The Babylonians used herb-laced wine vinegar as a condiment. Cleopatra dissolved precious pearls in vinegar to prove she could consume a fortune in a single meal. Roman legionnaires chugged refreshing vinegar beverages. Hannibal doused troublesome mountain pass boulders with heated vinegar to cleave and crumble them. And ancients everywhere treasured it for its medicinal applications.

Vinegar can be fermented using barley malt and other grains, sugars such as honey or sorghum, and a myriad of fruit, especially apples.

The common crock method is the essence of simplicity. Using fresh, unpasteurized sweet cider, fill a sanitized crock or dark-colored glass jug three-quarters full (if you don't allow for foaming during fermentation, you'll be sorry).

Secure a triple layer of cheesecloth or a clean cotton tea towel over the top and stow it in a cool, dark place for two to six months. Begin tasting it when your nose detects a vinegary scent in the crock's general locale.

When the vinegar suits your palate, it's done. Filter it through cheesecloth into sterilized jars and store it in the refrigerator, or pasteurize by heating to 160 to 180 degrees F. Use it in salad dressings (plain or flavored), for medicinal purposes, or diluted in household cleaning applications. Note: Don't can with homemade vinegar. Its acidity isn't equal to store-bought varieties.



“Cider, and doughnuts,” Mark Twain once said, “make old people’s tales and old jokes sound fresh and crisp and enchanting.” Cider itself is fresh, crisp and enchanting. And never better than when it’s cider from your own home press.

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