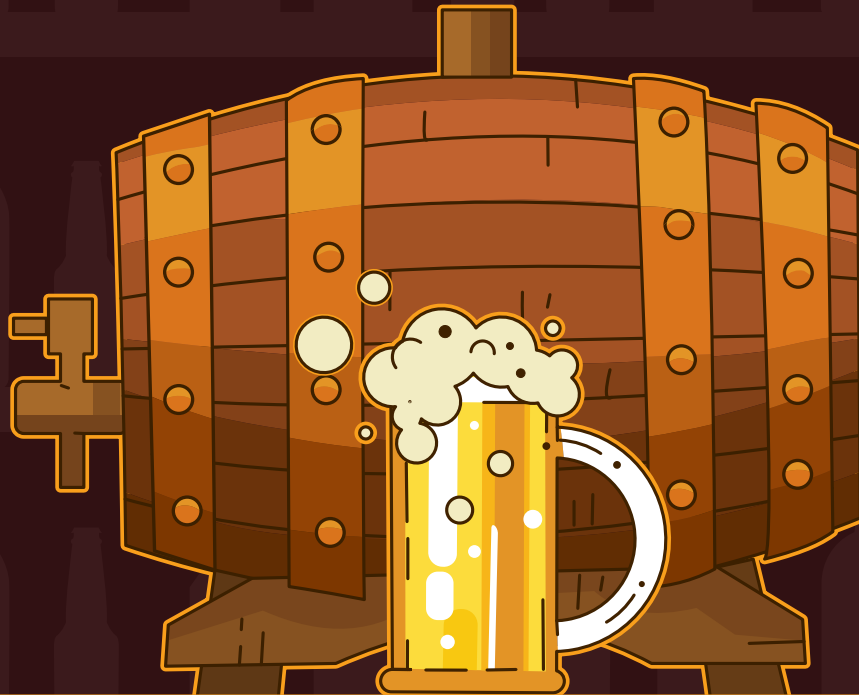




BEER 101



INTRODUCTION

You had a hard day at work and it's been a long week. At the moment, all you want is to be horizontal on your couch with no plans in the immediate future. It's finally 5 pm and you are in a full on fast walk to your car when your boss yells from the door, "Hey, don't forget your keg!" That's right, in this hypothetical scenario, instead of bi-weekly checks, your 9 to 5 job pays you in beer.



BEER SINCE WHEN?

Although this situation seems far-fetched and completely unrealistic in this day and age, it hasn't always been. The history of beer can be dated all the way back to 4300 BCE. During this period, beer was not only used as wages for workers, it was also present in many medical prescriptions. It may be hard to believe that your favorite bold and refreshing beverage was being consumed before the Middle Ages, but believe it. Recipes for at least twenty types of beer were found on Babylonian clay tablets, making beer the oldest recorded recipe in the world. Beer didn't always resemble the complex, hoppy, and flavorful IPAs we are accustomed to today. The beer being brewed during this era would actually be considered harsh by today's standards. These beers were made with things like dates, pomegranates, and other herbs.

The Middle Ages, around 500 - 1000 CE, is when Europe became the beer loving continent we know today. In this era, beer became widespread in Europe and started to look and taste like the modern beer that we are familiar with in the present-day. Beer was also used for trading, payment, and taxing.

1000 CE was a big year for beer. This is when hops were introduced to the brewing process. Hops bring the bitterness and flavor that has become very popular in the craft beer industry. Not only do hops add a bitterness and aroma, they also act as a natural preservative, extending the life of beer. Along with Northern Europe, beer was being brewed and becoming popular in areas like Germany, Belgium, and the British Isles as well. These areas are where styles of beer like pale ales, porters, and stouts were born.

During the 1600's, the first shipment of beer arrived in the Virginia colony from England. Settlers got their first taste and could not get enough. Soon after, the first commercial brewery in the New World would be opened in New Amsterdam, the modern-day New York City. By 1810, New York City contained 132 operating breweries. By 1850, that number would expand to 431, and by 1868 there were 3,700 breweries in operation in America, producing 6 million barrels of beer. That's a lot of people who really love beer! The increased demand for beer was due in large part to the arrival of millions of immigrants.

Similar to the first time you and your underage friends got caught by your parents attempting to sneak a few brews, trying to satisfy your growing curiosity, the fun eventually had to end. Except, in this case, everyone is over 21 and legally able to drink, your parents are the government, and your punishment is jail time. That's right, I'm referring to Prohibition. A radical change came in the form of the Prohibition Amendment, which was ratified on January 16th, 1919 and went into effect in 1920. The 18th Amendment made the sale, manufacture, and transportation of alcohol in the United States illegal. It was ratified in an attempt to reduce crime and corruption, reduce the tax burden, solve social problems, and improve the health of Americans. Not surprisingly, this made a lot of people very angry. In reality, Prohibition had a very negative effect on the economy. Not only did people lose their jobs, but a large

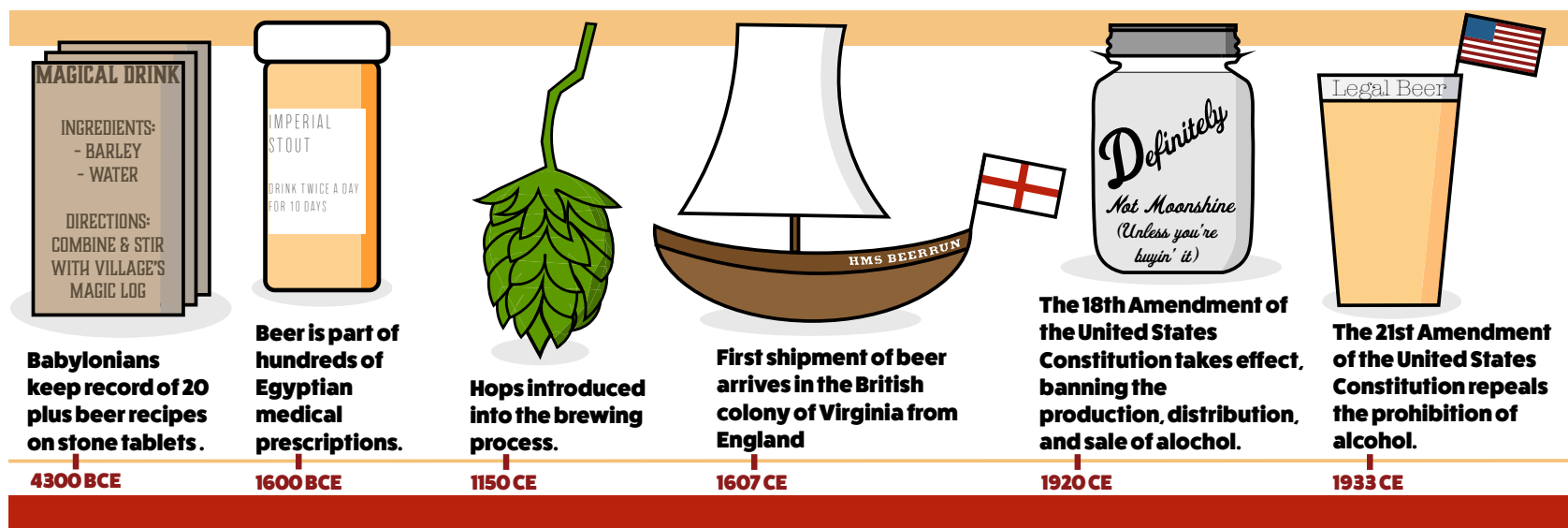


number of jobs were eliminated altogether, such as jobs in breweries, saloons, and distilleries. Advocates of Prohibition predicted the ban of alcohol would boost sales of other forms of entertainment, but it had the opposite effect. Theaters and restaurants couldn't stay in business because they were no longer able to sell alcohol. Prohibition was about as successful boosting the economy as it was at reducing crime. Instead of decreasing the crime rate, it rose significantly during this time period due to the production and trade of illegal alcohol.

By the 1930's, the complaints about corruption and crime, general disregard for the law, and the diminishing support of Prohibition was enough for the government to throw in the towel and chalk this one up as a loss. In December of 1933, the 21st Amendment repealed 18th Amendment, making the sale, manufacture, and transportation of alcoholic beverages no longer prohibited. After the repeal of Prohibition, the United States was in the midst of a major depression. Before Prohibition there were over 3,000 breweries in operation in the United States, and after there were only a few hundred.

After the depression, the beer scene continued to gradually regain popularity. By 1996, the craft beer market began to take off. There were 1,102 craft breweries that produced 5.3 million barrels of beer and 333 new brewpubs and microbreweries opened in one year. In 2012, craft brewers reached 6.5% volume of the total U.S. beer market. There were 2,347 craft breweries in operation in 2012 - 1,132 brewpubs, 1,118 microbreweries, and 97 regional craft breweries. By 2016, craft brewers reached 12.3% volume of the total U.S. beer market. The craft dollar share of the total U.S. beer market reached 21.9%, and the retail dollar value from craft brewers was \$23.5 billion. As of 2017, there are over 5,200 U.S. breweries in operation. Of those craft breweries - 3,132 microbreweries, 1,916 brewpubs, and 186 regional craft breweries.

From being the oldest recorded recipe in the world to being banned across the United States, to over 5,200 breweries operating in the U.S. alone, beer has had an important role in history. Since the 1990's the craft beer scene has experienced increasing popularity. As of today, in the U.S., there are over 150 styles of beer and over 20,000 brands to choose from. Craft breweries are making more beer today than they ever have in the past. Beer has had an interesting and ever-evolving place in history, there is no telling what the next point on the timeline will be.

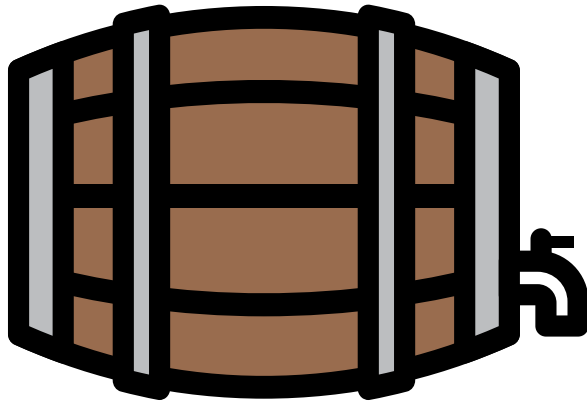


COMMON BEER STYLES

Whether you are just tapping into the beer scene or noticing the growing number of beer options other than “light” on your bottles and cans, there are some common beer styles you should know. If you don’t want to be that person by the beer cooler who doesn’t know their IPAs from their ESBs, here is a common list of beer styles to drink in before your next beer run.

American Lager

Mass produced by macro breweries such as Anheuser-Busch, the pale yellow American Lager is a popular light bodied and low bitterness beer with a less complex flavor than other beer styles, designed to be light crisp, and refreshing. *Examples: Budweiser, Coors, PBR (Pabst Blue Ribbon)*



Bourbon Barrel Aged Beer (BBA)

A Bourbon Barrel Aged or BBA beer is beer that is aged in bourbon barrels for a length of time. A popular style that is often barrel aged is the imperial stout, but craft breweries have been known to experiment with aging other styles. Barrel aged beers typically have a higher ABV, and with the additional time of the barrel aging process, will cost more as well. *Examples: Founders Kentucky Breakfast Stout (KBS)*

Extra Special Bitter (ESB)

The Extra Special Bitter or ESB is a popular British style beer that has become a standard for American breweries due to its clean, crisp balanced hop and malt flavor. ESBs are lower in ABV and are an easy session drink. *Examples: Fuller’s ESB, 3 Floyds Lord Rear Admiral, New Belgium 2° Below*

Imperial Stout

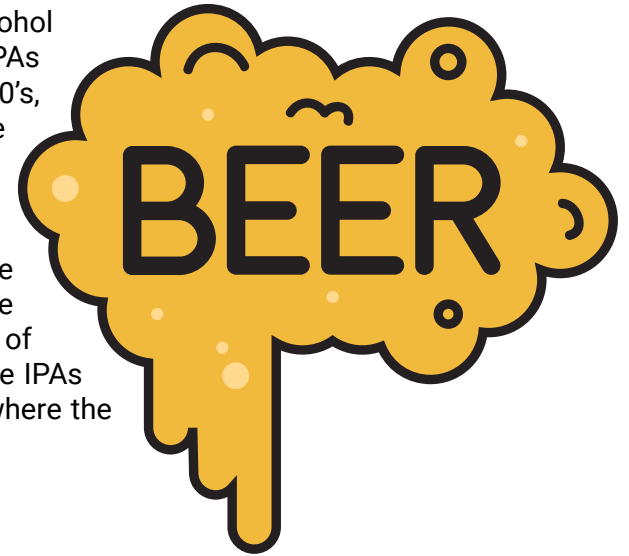
An Imperial Stout, or Double Stout, has the same characteristics of a Stout but are fuller bodied, richer, and have a higher ABV around 10%. The Imperial Stout style was first brewed for Emperor Peter the Great of Russia and has become a popular style for many American craft brewers. *Examples: Founders Breakfast Stout, North Coast Old Rasputin, 3 Floyds Dark Lord*



Indian Pale Ale (IPA)

India Pale Ales, better known as IPAs, are a hop-forward beer that consists of higher alcohol content, or ABV, and bitterness levels, or IBU, compared to more traditional styles. IPAs have an interesting history – they were originally brewed out of necessity. In the 1700's, there was a large demand for beer in India, but most beers wouldn't be able to survive the almost six-month long journey by ship from England that it would take to reach the east, and the climate in India was too warm for beer to be brewed there.

Hops had already been introduced to the brewing process at that time, but by the late 1700's, a London brewer decided to send a beer packed with hops to India. One of the many benefits of hops is they act as a natural preservative, by the time the shipment of beer arrived in the east, the beer tasted even better than it did when it had left. These IPAs evolved into paler, more refreshing beers, perfect for the hot Indian climate. This is where the



American-Style IPA

The American-Style IPA is a revival of the English IPA. This style of IPA has high bitterness with strong hop flavors that include citrus, fruit, and herbal flavors. These beers have a gold to copper color and have ABV's that most commonly range from 6.3% to 7.6%. *Examples: Dogfish Head 60 Minute IPA, Bell's Two Hearted Ale*

Black India Pale Ale

A Black IPA or BIPA consists of similar hop properties of an IPA but with a mix of dark and toasty malt character. This hybrid brew is becoming more popular in craft breweries due to its distinct flavor profile between an IPA and a Stout. *Examples: Stone Sublimely Self-Righteous, Sierra Nevada Blindfold Black IPA*

English-Style IPA

English-Style IPA is the original IPA style. This style of IPA is less hoppy than the American-Style IPA with medium to strong bitterness. Flavors in the English-Style IPA include fruit, herbal, and earthy flavors. These beers also have a gold to copper color and have ABV's that range anywhere from 4.5% to 7.1%.

Examples: Samuel Smith's India Ale, HopFish IPA, Guinness Nitro IPA

Imperial (Double) IPA

This style of IPA is named "Double" for a reason. Imperial IPAs are much more intense than even the American-Style IPA. This beer contains very high, but not harsh, bitterness and very strong hop flavors. Hop flavor is fresh and evident in this style of beer. These beers have a gold to dark red color, with common

ABV's ranging from 7.6% to as high as 10.6%. *Examples: The Alchemist Heady Topper, Green Flash West Coast IPA, Bell's Hopslam Ale*

Session IPA

Session IPAs are much less intense than the American-Style IPA. This style of beer contains a medium to strong bitterness, but still has a strong hop flavor. Session IPAs have fruit flavors, with low to medium maltiness. Session IPAs were initially crafted because brewers wanted to make an IPA that had a lower ABV. These beers have a gold to copper color, with low ABV's ranging from 3.7% to 5%. *Examples: Founders All Day IPA, Lagunitas DayTime IPA, Introvert Session IPA*

Pilsner

A Pilsner is more or less used synonymously with the lager style and features a pale golden color, crisp flavor, and a refreshing finish. Today, nearly 95% of beer in the world is some form or imitation of the pilsner style originally created in the Czech Republic in the mid-1800s. *Examples: Lagunitas PILS, Sierra Nevada Summerfest Lager, Samuel Adams Noble Pils*

Porter

The Porter style is a dark beer with strong characteristics of rich chocolate combined with notes of coffee, caramel, and occasional smokiness. Porters can feature additional flavor profiles consisting of mocha, java, and vanilla.

Examples: Deschutes Black Butte, Rogue Mocha Porter, Breckenridge Vanilla Porter

Stout

Similar to a Porter, a Stout is a bold flavored dark brown or black colored beer with roasted chocolate and coffee notes due to the distinct roasted grain used to brew this style. Some Stouts include vanilla, milk, and even oatmeal. *Examples: Guinness Draught, Bell's Kalamazoo Stout, Left Hand Milk Stout*

Ales

The main, and most distinguishable, characteristics of an ale are their strong and complex flavors. Ales tend to have more of a fruity flavor and have a higher bitterness, or IBU. Ales are the oldest types of beer and are often times darker with a larger amount of hops. Some of the most common types of ales are pale ales, brown ales, porters, and stouts. *These include beers like Sierra Nevada Pale Ale, Newcastle Brown Ale, Fuller's London Porter, and Samuel Smith Oatmeal Stout.*

Lagers

Lagers, in contrast, have a light, crisp taste and are more carbonated than ales. Lagers are also typically less bitter than ales. It is recommended that most lagers be served cold, with very few exceptions. Some of the most common types of lagers are pale lagers, pilsner, light lager, and dark lager. *These include beers like Stella Artois, Sierra Nevada Summerfest Lager, Bud Light, and Heineken Dark Lager.*

ALES V LAGERS

Fermentation

The primary difference between an ale and a lager is that they use two different types of yeast during the brewing process. Ales use a type of yeast that flocculates, or gathers, near the top of the fermentation tank during the brewing process. Lagers, on the other hand, use a type of yeast that ferments at the bottom of the tank.

Temperature

The top-fermenting yeasts used to make ales work better in warmer temperatures. Temperatures around 60 to 78 degrees Fahrenheit work the best for brewing ales. Due to the higher temperature, ales ferment faster than lagers. Their quick brew cycle is only about 7 days. Lagers ferment the best at colder temperatures around 48 to 68 degrees Fahrenheit. They have a longer brew cycle, up to several months.

BEER TERMS

ABV, IBU, SRM, OG, FG! No, this isn't a late night text message from your less than sober friend, these are acronyms that describe the characteristics of your beer. Certain measurements including alcohol content, color, and bitterness – along with the type of grains and yeast used – determine which style your beer is and they are often included on beer labels to help you distinguish differences within the same style. Here are some common beer terms and measurements you should know before you crack open your next cold one.

ABV (Alcohol by Volume)

Alcohol By Volume or ABV is the amount of alcohol content in beer. ABV is calculated using specific gravity measurements taken before (OG, i.e. original gravity) and after (FG, i.e. final gravity) fermentation. $ABV = (OG - FG) \times 131$ and generally ranges from 4% to 10% for most beer styles. A low ABV is reserved for Pale Ales, Lagers, and Pilsners while higher ABV levels are found in IPAs, imperial styles, and barleywines. In comparison, alcohol in liquor is measured using a "proof" system in which the proof is double the ABV. For example, an 80 proof bottle of liquor has 40% ABV.

Common Average Beer ABV by Style:

4% to 6% – Lager, Pilsner, ESB

5% to 6.5% – Pale Ale, Porter, Stout

6.5% to 7.5% – IPA, Black IPA

7.5%+ – Imperial/Double IPA, Imperial Stout, BBA

ABW (Alcohol by Weight)

Alcohol in beer can also be measured by weight or ABW. Although the measurement is less commonly used in the US compared to ABV, you may occasionally see some ABW measurements on beer labels – especially if they are imports. In order to calculate the ABV from ABW, multiply the ABW by 1.25. Conversely, if you needed to calculate the ABW from the ABV, multiply the ABV by 0.8.

IBU (International Bitterness Units)

International Bitterness Units or IBU is the world-standard measurement for beer bitterness. IBUs are generally based on the amount of hops in the beer and can range from 5 for American Lagers up to 100+ for styles like an Imperial IPA.

Beer IBU by Style:

0 – 20 IBU – American Lager

20 – 45 IBU – Pilsner, Porter, ESB, Pale Ale

45 – 70 – Stout, IPA

50 + – Imperial IPA, Imperial Stout, Barleywine



SRM (Standard Reference Method)

The color of your beer is determined by the SRM or Standard Reference Method of measurement. The SRM is calculated by a formula from the American Society of Brewing Chemists, but all you need to know is that the numbers range from 2 for a light yellow beer such as an American Lager to 40+ for a midnight black beer like an Imperial Stout.

Beer SRM by Style:

2-14 – American Lager, Pilsner, ESB, Pale Ale, IPA

15- 24 – Amber Ale, Brown Ale

24+ – Porter, Stout, Imperial Stout

OG (Original Gravity)

OG or Original Gravity is a density measurement based on the amount of sugar in pre-fermented beer, also known as wort. Measured with a tool called a hydrometer, Original Gravity is the beginning to ultimately determine the final ABV of a beer. OG can range from 1.030 to 1.140. Low gravity beer is reserved for crisp styles like American Lagers while a high gravity beer is for malty styles like an Imperial Stout.

FG (Final Gravity)

FG or Final Gravity is a density measurement taken after beer has been fermented. Fermentation happens when yeast is added to wort. During days, weeks, or months, yeast eats the sugar and produces CO₂ and alcohol, which turns the wort into beer. The OG and FG measured during this fermentation process are both used to determine the final ABV of beer. FG can range from 1.000 to 1.060.

BEER GLASSWARE

Beer can be enjoyed in a variety of ways, but if you drink directly from the bottle or can you could be missing out on some of your beer's best characteristics including color, aroma, and enhanced flavor. Pouring beer into a glass exposes these additional features which triggers your senses and improves your overall experience with that beer. These are the three main reasons you should be drinking your beer from a glass:

1. **Taste & Aroma:** More than 70% of taste comes from our sense of smell. Hence why food tastes bland when your nose is blocked. Drinking from a bottle doesn't allow you to smell the beer when sipping. It's also why most people say beer on tap tastes better.
2. **Aesthetics:** We drink with our eyes. We judge things by appearance and just the look of a beer can alter our perception of taste, smell, and flavor. Glassware provides visual stimulation for color, clarity, and carbonation.
3. **Carbonation:** Beer glasses assist in head retention. Good head allows the release of ester volatiles which are picked up by the nose, assisting in the detection of different flavors. Carbonation also affects mouthfeel.

Depending on the beer style, glassware is specifically shaped and curved to provide an ideal environment for your beer to be consumed. From bottle to snifter, here is a list of common beer glasses and what styles of beer you should pour in them.



Flute

Similar to a champagne glass, a flute is tall and narrow with a stem in order to showcase the bubbly carbonation and sparkling colors of effervescent beer. **Beers to drink in this glass: Flanders Red Ale, German Pilsener, Bière Brut**



Goblet

Goblets, unlike a lot of other types of beer glassware, can be found in a variety of different sizes. This type of glassware is most commonly used with heavy, malty beers. Goblets have a wide opening that helps the beer drinker better analyze the flavors and aromas. **Beers to drink in this glass: Belgian IPA, Belgian Dubbels, Imperial Stouts**



Mug/Stein

A mug or stein are fan favorites because they are sturdy, feature a convenient handle, and hold a great deal of beer. Because of their hefty design, these glasses are ideal for large and lively festivals because they are strong enough for hearty toasts and cheers. Both glasses come in a variety of sizes, but the stein features a lid and is typically not made of glass. The stein lid was crafted in Europe during the 16th century in order to protect from spreading disease and continues to be popular in Germany and as a souvenir. **Beers to drink in this glass: American Ales, American Lagers, English Ales, German Lager**



● **Pilsner**

A glass designed for the beer style by the same name, a pilsner glass is skinny and long with a wider top to accommodate for the head. Similar to the flute glass, the pilsner amplifies the carbonation and color of the classic pils style and is used primarily for lighter beers. *Beers to drink in this glass: American Pilsners, American Lager, Light Lager*



● **Pint/Tumbler**

A pint glass or tumbler is one of the most common beer glasses for restaurants and bars because they are low cost, simple to clean and stack very well. The US style pint glass, called a tumbler, is 16 ounces, has a cylinder-shaped bottom, and gradually widens near the top of the glass to accommodate for the head of the beer when poured. The Nonic or Imperial style pint glass is 20 ounces and features a curved ridge near the top of the glass for beer that requires additional head room. Tumblers and nonic pints are a great start to building your beer glass library because a majority of beer styles can be served in them including pale ales, IPAs, lagers, and stouts. *Beers to drink with this glass: American Stout, American Porter, English Pale Ale, American Pale Ale, India Pale Ale*

● **Snifter**

A snifter is similar to a wine glass with a wide-bowled bottom, slightly narrowed top, and shorter stem. This type of glass is reserved for stronger and higher ABV type ales due to its ability to showcase their aromas and is an excellent addition to your cabinet especially if you are a fan of Imperial IPAs, Imperial stouts, or burly barleywines. *Beers to drink in this glass: Belgian Dark Ale, Imperial (Double) IPA, Imperial (Double) Stout, Barrel Aged brews*



● **Stange**

A stange is a German-style glass that is generally smaller in volume compared to other glassware and shaped like a skinny cylinder or rod. Although stange seems like a very strange name, this type of glass is named stange because it is the German word for rod, which is exactly what this glass resembles. The glass is used for delicate beer styles such as a Kölsch that require some assistance to showcase their complete aroma and flavor profiles. *Beers to drink in this glass: Rye Beer, Czech Pilsner, German Kölsch*

Tulip

The tulip glass is designed to trap and maintain the foam head of the beer. This aids in enhancing the flavor and aromas of hoppy or malty beers. The top rim of this glass curves outward, forming a lip. The glass is designed like this to catch the foam head.

Beers to drink in this glass: Belgian Pale Ale, Belgian Strong Ale, American Imperial (Double) IPA, India Pale Ale

Weizen

Enjoyed with the popular weizen or wheat style beer, the weizen glass is generously curved with a wider top to allow room for the large amount of pillowy head and showcase the delicious banana aromas produced by this summer favorite style.

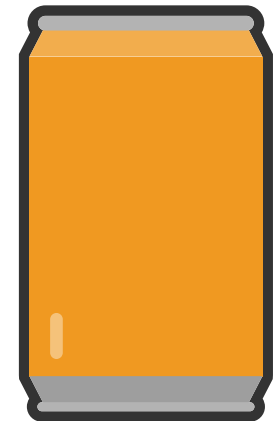
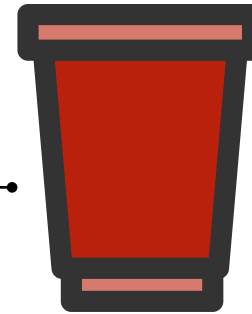
Beers to drink in this glass: All wheat beers, American Pale Wheat Ale, American Dark Wheat Ale

Cup

Popular at colleges, birthday parties, and backyard BBQs, a cup is still a nice social option especially when a lot of beer needs to go around and minimal dishwashing is desired. Lagers and high quantities of beer are served in a cup especially if you are tapping from a keg and don't have a large amount of glassware available.

Bottle/Can

We aren't total beer glass snobs here! If you don't have any of the glassware above or you don't feel like washing yet another glass, a bottle or can will still get beer into your mouth if that's your ultimate goal.



Now that you are an expert on beer history and know what all of that beer terminology means, let's talk about a few how-to's and what foods to pair with different beers so you have a well-rounded knowledge of all things beer.

FAVORITE BEER GLASSWARE



Pint
Inexpensive to Make and Easy to Stack
Standard Ales/Lagers



Snifter
Captures and Enhances Volatiles
Stouts, Barleywines, Imperial IPAs,
Sour Beers, Belgian Style Ales



Mug
Easy to Drink Out of and Holds a lot of Beer
American/German Ales and Lagers



Tulip
Captures and Enhances Volatiles and Induces Large Foamy Heads
Belgian Style Ales, Scottish Ales,
IPA's & Sour Beers



Weizen
Takes on Volume and Head and Locks in the Banana-like and Phenol Aromas
Wheat Beers & German Style Ales/Lagers



Pilsner
Showcases Color, Clarity and Carbonation
Pilsners/Lagers



Flute
Enhances and Showcases Carbonation
Sour Beers, Guezes, Lambics,
German Ales/Lagers



Stange
Tighter Concentration of Volatiles
Kölsch/Pilsners, Gueuzes & Lambics



Goblet
Wide-mouthed Designed for Deep Sips and Maintains Head
Belgian Style Ales, Belgian Dubbels,
Quads, Tripels

[click here to download a copy](#)

POURING THE PERFECT PINT

If you were to compare draft beer pours from your bartenders, how would they match up? Training your staff to pour beer properly is key to keeping draft beer waste low because over-pours and sloppy oversights are costly habits that add up quickly. Follow the tips below to perfect your pouring habits – and don't forget to share them with your staff!

Rinse the glass

The glass should already be clean, but a quick rinse lessens friction when the beer is being poured, which makes the process smooth and easier to get right. Don't chill or "frost" the glass before pouring.

Tilt the glass at a 45-degree angle

Tilting the glass will prevent too much head from forming during your pour. Begin pouring the beer, aiming for the middle of the glass. Try not to pour too slowly. Super slow pours result in no head. The goal is to end with about an inch of foam, which is necessary to enhance aromatics. Taste is strongly influenced by the proportion of beer to head.

Straighten the glass when it's 2/3 full

When your glass is about 2/3rds full, bring it to a 90-degree angle and continue to pour in the middle of the glass. This will create the perfect foam head. An ideal head should be 1-1.5 inches. Altering the angle of the glass will prevent too much foam from forming.

Clean dirty glasses with glass detergent

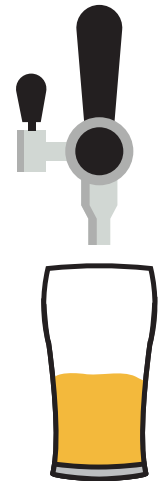
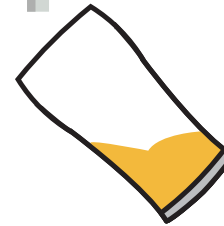
Regular dish detergent typically has a petroleum base, which leaves a film on glasses and kills beer head and taste. Cleaners made specifically for glass are comprised of other compounds and better preserve beer.

The perfect pour

How to pour a beer depends on the type of beer. For most craft beers, the best way to pour is right down the middle of the glass, as long as the glass is big enough to hold the whole bottle of beer. Follow these steps and guidelines to ensure you achieve a perfect pour each and every time



**STEP 1
POUR DOWN THE SIDE OF GLASS
AT A 45° ANGLE**



**STEP 2
ONCE 2/3RDS FULL POUR STRAIGHT IN
THE MIDDLE OF GLASS AT A 90° ANGLE**



**STEP 3
STOP WHEN YOU HAVE A 1" HEAD
(FOAM) AND ENJOY A PERFECTLY
POURED PINT**

WHAT CAUSES FOAM?

We all know that too much beer foam is a bad thing – it's easy for customers to spot a pint with too much foam and it also contributes to waste. To manage draft beer foam (also known as beer head) and the waste it produces, you need to keep an eye on two key elements: pressure and temperature.

Maintaining the proper temperature and right level of CO2 pressure once the keg has been tapped is a balancing act. The safest bet is to work with an experienced draft technician to determine the right gas blend and pressure. When CO2 pressure is set too high, gas is forcing beer out of the keg too quickly, causing it to be overly foamy. The mixture of high CO2 pressure and over-carbonated beer also causes excess foam. When CO2 pressure is too low, little or no foam amounts. In both situations, check the regulator for correct pressure settings.

Sometimes the problem is further down the line. Follow its path to be sure it isn't crimped, blocked, or otherwise obstructed.

Another best practice is to let the keg sit in the cooler untapped for 24 to 36 hours. Consider how a can or bottle of beer erupts when it's shaken and tossed around. Your keg may have been jostled around in the journey from the truck to your bar. Let it settle, just to be safe.

When kegs get too warm, excess carbon dioxide is released, causing foam to erupt and the beer to go sour and become cloudy. About 25 percent of foam is beer, so allowing foam to accumulate in the keg cheats you out of sellable product.

Store beer at a constant 38 degrees Fahrenheit to prevent foaming once the beer leaves the keg, make sure the lines can maintain the same ideal 38-degree temperature.



BASIC BEER & FOOD PAIRINGS

We all love good food and even better beer. Luckily, we are fortunate enough to be blessed with an abundance of both. As of 2016, there are over 5,200 breweries in operation in the U.S., of those are over 2,000 craft breweries. It's becoming increasingly difficult to know what kind of beer to get with your food, or more likely, what kind of food to get with your beer. Don't get me wrong, this is a good problem to have. Here is a guide to help you easily pair great food that compliments great beer and enhance your entire dining experience.

Salad & Wheat Beers

Pairs best with very light beer foods such as salads, vegetarian dishes, and sushi

Seafood & Lagers and Pilsners

Pairs great with lighter foods such as salads, light seafood, roasted foods like chicken

Mexican & Pale Ales and IPAs

Great with a wide range of food such as fried foods, pork, turkey, and spicy foods

Barbecue & Amber Ales

Pairs with a wide variety of foods like chicken, seafood, barbecue, and caramelized vegetables.

Hamburgers & Brown Ales

Tastes best with hearty foods like roasted pork, grilled chicken or salmon, ham, and burgers.

Chocolate & Stouts

Great with rich stews, smoked foods, roasted foods

Steak & Porters

Pairs best with roasted or smoked food such as barbeque, sausages, steaks, and blackened fish





Now that you're well-informed on all things beer, you can no longer consider yourself a beer novice. Whether you are enjoying a night out on the town or having dinner at a nice restaurant, you can impress all of your friends with your newfound beer knowledge.