

B E E R



cereals, hops and water

part of traditional and modern celebrations

Beer is one of the oldest and most popular alcoholic beverages in the world. It is usually made from cereals, most commonly barley. Beer is a drink with a long history and broad cultural significance, having become part of many traditional and modern celebrations, rituals, and daily life.

History

History

Its history stretches back more than 7,000 years. The oldest archaeological findings indicate that the first beer was produced in ancient Mesopotamia, around 5,000 BCE. At that time, beer was made by fermenting cereal mash and had the consistency of a thick, porridge-like beverage, often consumed through straws.

Beer was also known in ancient Egypt, where it became a common part of the diet. Egyptians considered beer a gift from the gods, and for this reason, its production and consumption were part of religious ceremonies. Beer in Egypt was regarded as a drink for all social classes, both poor and wealthy.

In the Middle Ages, beer production in Europe became part of monastic life. Monks became experts in brewing, and craft breweries were widespread in monasteries across Europe.

In the 16th and 17th centuries, beer production became more formalized. In Germany, the **Reinheitsgebot** – the Beer Purity Law – was introduced, stipulating that beer could contain only barley, water, and hops. This law aimed to ensure the quality of beer and regulate its production. During this period, the first commercially produced beers began to appear, gradually becoming popular beverages.

Beer in the 21st century

One of the most prominent trends in beer today is the increase in diversity, driven by the craft brewery boom. These small, independent breweries typically focus on the quality and uniqueness of their products, leading to a wide range of flavors and styles. From traditional lagers to experimental beers with unusual ingredients such as fruit, spices, or even coffee, today's beer selection is more varied than ever before.



Beer Production

Beer production is a complex process involving several steps: malting, mashing, wort boiling with hops, fermentation, maturation, and bottling or kegging.

Milling and Mashing

The first step in beer production is milling the malted barley, which is then mixed with hot water. This process is called mashing.

Wort Production

Mashing involves heating the mixture of malted barley and water (the mash) in precisely controlled temperature steps to activate various enzymes in the malt. These enzymes convert starches into sugars and proteins into simpler compounds. This process greatly contributes to the flavor profile of the resulting beer. During this stage, the liquid extract known as wort is produced.

Boiling and Adding Hops

During boiling, hops are added, which are a key ingredient for beer flavor. Hops are climbing plants used to preserve beer, add aromatic notes, and create the characteristic bitterness. Female hop cones are used in various forms, such as hop extract or hop pellets. Czech hops are among the highest quality in the world. The most sought-after variety is Žatecký poloraný červeňák, which contains lower amounts of bitter compounds than other varieties but excels in aromatic compounds (resins, essential oils, and polyphenols). Hops are responsible for balancing the sweetness of sugars with bitterness. Boiling also sterilizes and concentrates the beer. Boiling duration and the amount of hops added vary depending on the beer type.

Fermentation

*After boiling, the beer is cooled, and yeast is added. Brewer's yeast are microorganisms, specifically unicellular fungi, that play a crucial role in beer fermentation. They convert sugars into alcohol, carbon dioxide, and a variety of aromatic compounds that define the beer's final taste, aroma, and alcohol content. Two main types of yeast are commonly used: *Saccharomyces cerevisiae* (top-fermenting yeast), which ferments at 15–24°C and is used for Ale and wheat beers, and *Saccharomyces pastorianus* (bottom-fermenting yeast), which ferments at 6–12°C and is used for lagers. Fermentation can last from a few days to several weeks, depending on the beer type and desired flavor intensity.*

Maturation and Filtration

After fermentation, the beer matures to stabilize and clarify its flavor. Some types of beer, such as lagers, may mature for several months. During maturation, beer is filtered to remove unwanted particles and ensure clarity.

Packaging

After maturation, beer is ready for bottling, canning, or kegging. Some beers are pasteurized to extend shelf life, while some craft beers may be unpasteurized and fresh, preserving their fuller flavor.





Types of Beer

There are many types of beer, differing by production method, ingredients, and taste. Some of the most well-known categories include:

Lager

Lager is one of the most common types of beer. It is fermented at lower temperatures, giving it a fresh, clean, and refreshing taste. Lagers are usually light golden, but dark versions also exist.

Ale

Ale is fermented at higher temperatures, giving it a richer, fruitier flavor. Ales are often more aromatic and stronger in taste than lagers. Well-known subtypes include Pale Ale, India Pale Ale (IPA), Porter, and Stout.

Wheat Beer (Weizenbier)

Wheat beers are made from wheat and barley, giving them a fresh, fruity taste. They often have a cloudy appearance and are typical of Germany and Belgium.

Trappist beer

This beer is produced by monks in Trappist monasteries. It is an Ale that can have various styles, including dark and strong varieties. Trappist beers are known for their high quality and authenticity.

Lambic

Lambic is a Belgian beer that ferments spontaneously using natural yeasts from the surrounding environment. Lambic beers often have a sour and fruity taste.

Specialty Beers

There are also specialty beers, which include beers flavored with fruit, spices, or other unusual ingredients, such as raspberry beer or beers with coffee or chocolate flavors.



Uses of Beer

Beer is not just a drink for direct consumption but has wide applications in gastronomy and culture.

Beer is a great ingredient in cooking, adding depth and richness to many dishes. It can be used in meat marinades, sauces (for beef or chicken), and in batters for fried foods such as fish or vegetables. Beer is also part of some desserts, such as chocolate beer cake or beer in baked goods.

Beer is often used in cocktails, especially combined with liqueurs or fruit juices. Examples include Shandy (beer mixed with lemonade), Michelada (beer with lime and spices), or Black Velvet (a combination of stout and champagne).

Beer pairs wonderfully with food. Lagers go well with various cheeses, wheat beers with fish and seafood, and strong beers such as Stouts or Porters with rich dishes like grilled meats or chocolate desserts.

Beer has a strong cultural presence in many countries, such as Germany (Oktoberfest), the Czech Republic, Belgium, or Ireland. Beer festivals are popular worldwide and provide excellent opportunities to taste new beers and meet brewers.

Beer is not only a beloved beverage but also a part of history and culture. Its production is an art that has evolved over millennia, and the variety of beers offers a wide range of flavors enjoyed not only when drinking but also in cooking and gastronomy.