

Chapter 1

Drink Up! Beginning with Beer Basics

In This Chapter

- ▶ Building beer from the ground up
 - ▶ Checking out a variety of beer styles
 - ▶ Buying and enjoying beer in different ways
 - ▶ Taking a worldwide tour of beer
 - ▶ Making your own brews
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To most people, beer is a simple, one-dimensional product that serves two primary purposes: as an antidote for thirst and as an inexpensive, easy-to-obtain intoxicant. (One's viewpoint is often determined by one's age.) In American culture, beer has generally been considered a blue-collar beverage, undeserving of respect or a rightful place on your dinner table.

From a more worldly perspective, particularly in those countries known for their brewing expertise, beer is an unpretentious — but respected — socially accepted libation meant to be enjoyed on any occasion or at any time of day. It's also produced in various flavors and regional styles that make it more conducive to comparative tasting and even (gasp!) enlightened discussion.

Historically speaking, beer was for the longest time a staple in the human diet, as well as the respected handicraft of the local brewer. Beer was not only a means of refreshment but also an important source of vitamins and nutrients in a form that was happily ingested and easily digested. Looking far beyond written history, beer has also been theoretically linked with the civilization and socialization of mankind. Impressive, no?

In this chapter, I give you an introductory tour of the wonderful world of beer: its ingredients, its styles, its uses, and much more. Enjoy!



One of the side benefits of the current beer craze is the profusion of websites you can visit in search of good information about beer. Notice that I said *good information*; plenty of bad information is out there, too. To make sure you get lots of the good and none of the bad, here are just a few sites you can rely on for trustworthy and timely beer info:

- ✓ www.beerinfo.com
- ✓ www.beerme.com
- ✓ www.brewersassociation.org
- ✓ www.craftbeer.com
- ✓ www.realbeer.com

Introducing Beer's Building Blocks

So what is beer exactly? By excruciatingly simple definition, *beer* is any fermented beverage made with a cereal grain. Specifically, beer is made from these four primary ingredients:

- ✓ Grain (mostly malted barley but also other grains)
- ✓ Hops (grown in many different varieties)
- ✓ Yeast (responsible for fermentation; based on style-specific strains)
- ✓ Water (accounts for up to 95 percent of beer's content)

Grain provides five things to beer:

- ✓ **Color:** The color of the grains used to make a beer directly affects the color of the beer itself.
- ✓ **Flavor:** The flavor of the beer is primarily that of malted barley, although hops and yeast characteristics play a secondary role.
- ✓ **Maltose:** *Maltose* is the term for the fermentable sugars derived from malted grain. Yeast converts these sugars into alcohol and carbon dioxide.
- ✓ **Proteins:** Proteins in the grain help form and hold the *head* (foam) on the beer.
- ✓ **Dextrins:** *Dextrins* are the grain components that help create *mouthfeel* (the feeling of fullness or viscosity) in the beer.



Archaeologists and anthropologists have helped shed some light on the development of beer around the world. Evidence of beer making throughout the millennia has been found on six of the seven continents on earth (no harvest in Antarctica). Wherever grains grew wildly, the indigenous people made a beer-like beverage with them. Here are some examples:

- ✓ Asians used rice.
- ✓ Mesopotamians used barley.
- ✓ Northern Europeans used wheat.

- ✓ Americans used corn.
- ✓ Africans used millet and sorghum.

Over time, beer makers discovered that barley lent itself best to beer making, with the other grains playing a lesser role.

Hops provide beer with four attributes:

- ✓ **Bitterness:** Bitterness is essential to the flavor balance of the beer; it offsets the sweetness of the malt.
- ✓ **Flavor:** Hops have flavor that's distinctly different from bitterness, and it adds to the overall complexity of the beer.
- ✓ **Aroma:** The piquant aroma of hops, which mirrors their flavor, is derived from essential oils in the hops.
- ✓ **Stability:** Hops help provide the beer with stability and shelf life; their beta acids stave off bacterial contamination.

Brewers choose yeast strains based on which style of beer is being made (see the next section for an introduction to beer styles). The two main classifications of beer yeast are

- ✓ Ale yeast (*Saccharomyces cerevisiae*): Top-fermenting
- ✓ Lager yeast (*Saccharomyces uvarum*): Bottom-fermenting

The quality of brewing water is extremely important because beer is about 90 to 95 percent water. The mineral content of water can be manipulated and adjusted according to the requirements of the beer style being brewed.

For additional information on beer ingredients, check out Chapter 2. See Chapter 3 to find out how these ingredients are magically turned into beer during the brewing process.

Surveying Different Styles of Beer

As a generic word, *beer* includes every style of fermented malt beverage, including ales and lagers and all the individual and hybrid styles that fall under this heading. I provide a quick introduction to major beer styles in the following sections; for greater detail, check out Chapter 4 and Appendix A.



Within the realm of major beer categories, you find some truly special brews, such as real ale, barrel-aged and wood-aged beer, extreme beer, organic beer, gluten-free beer, and kosher beer. These kinds of beers don't represent new or different beer styles, per se. Rather, they represent different ways of making and presenting beer. Chapters 5 through 8 provide insight into these beers.



Ales versus lagers

The two major classifications of beer types are ale and lager. Every beer enthusiast should know some basic facts about these classifications:

- ✓ Ales are the ancient types of beer that date back into antiquity; lager beers are relatively new (only several hundred years old).
- ✓ Ales are fermented at relatively warm temperatures for short periods of time, while lagers are cold fermented for longer periods of time.
- ✓ Ales are fermented with *top-fermenting yeasts* (the yeasts float on top of the beer during fermentation), while lagers are fermented with *bottom-fermenting yeasts* (the yeasts sink to the bottom of the beer during fermentation).

Painless so far, right? Now to delve a little deeper: Within the ale and lager classifications, major beer style categories include Pale Ales and Brown Ales (in the ale family) and Pilsners and Dark Lagers (in the lager family). And the majority of major beer style categories include several different beer sub-styles. Here are just two examples of how this beer hierarchy plays out; many others are similar to these.

Stout (a type of ale)

Irish Dry Style Stout
London Sweet Style Stout
Foreign Style Stout
Oatmeal Stout
Russian Imperial Stout

Bock (a type of lager)

Traditional Bock
Helles Bock
Maibock
Doppelbock
Eisbock

Hybrid and specialty beers

In addition to the two major beer classifications (ales and lagers), a third beer classification that's an amalgam (more or less) of the first two is *hybrid beers*. Hybrid beers cross over ale and lager style guidelines. A beer fermented at cold temperatures, using an ale yeast, is an example of a hybrid, likewise for a beer that's warm fermented, using lager yeast.

Specialty beers, on the other hand, are practically limitless. This unofficial style of beer covers a very wide range of brews that are hard to define, much less regulate. Typically, specialty beers are brewed to a classic style (such as Porter or Weizenbier) but with some new flavor added; some are made from unusual foods that are fermented. Guidelines are useless, and brewing anarchy rules the brewhouse. The rules-be-damned attitude is what makes specialty beers so fun to brew and drink.

Shopping for and Savoring Beer

With the ever-increasing number of flavorful beers being made at craft breweries, along with the growing bounty of beers imported from elsewhere, today's beer consumers face monumental decisions every time they have to make a beer choice. The following sections provide pointers for buying, serving, tasting, dining with, and cooking with beer.

Buying beer

Beer is food. And like most foods, especially bread, beer is perishable and becomes stale over time, so the fresher the beer, the better it is. Therefore, beer consumers on the way to enlightenment want to consume beer that's freshly made and has been handled properly to maintain freshness — particularly if it has no preservatives, as is the case with most good beers.



Beer freshness has three enemies: time, heat, and light. Anything you can do to avoid buying beer that's been mistreated (and to avoid mistreating it yourself) is done in the name of fresh, tasty beer. Check out Chapter 9 for the full scoop on buying beer wisely.

As with all beverages that contain alcohol, governments maintain strict control over the labeling of those beverages. Unfortunately, when it comes to beer, the labels don't always help consumers understand what they're really buying. Similarly, breweries take liberties when they market their beers; these marketing liberties also lead to confusion on the part of the consumer. Chapter 10 walks you through this minefield of label laws and liberties to help you make good beer-buying choices.

Serving and tasting beer

Serving and tasting beer don't seem to be activities that require diligence, but, as a matter of fact, they do. Failing to properly serve a beer can have a measurable effect on your beer drinking pleasure.



Here are some pointers for proper beer enjoyment:

- ✓ **Make sure the beer is properly chilled or warmed, depending on the beer style.** Most beers should be served around 42 degrees Fahrenheit. (Make sure the beer isn't so cold that it numbs your tongue.) But some beers should be served lightly chilled or at room temperature.

- ✓ **Always pour your beer into a drinking vessel.** In other words, never drink straight from the can or bottle. Pouring your beer into a glass releases carbonation, which creates a head (and reduces its gassy “bite”) and brings out more of the beer’s aroma.
- ✓ **Always make sure your beer glasses are properly cleaned and stored.** Dirty, smelly glasses can ruin your beer and be a bad reflection on you.

For more tips on serving and tasting beer, have a look at Chapters 11 and 12.

Dining with beer

Where wine was once the preeminent beverage on dinner tables, it’s now being boldly challenged by the formerly blue-collar beverage called beer. People everywhere are discovering just how versatile and interesting beer is when you pair it with appropriate food choices.



Here are a couple of simple rules to get you started:

- ✓ Think of the lager beer category as the white wine equivalent. When compared to ales, lagers have the following characteristics:
 - Generally lighter in body and color
 - Narrower flavor profile and a high degree of drinkability (that is, tend to appeal to a wider audience)
- ✓ Think of the ale category as the red wine equivalent. When compared to lagers, ales have these qualities:
 - Typically darker
 - Rounder, more robust, and more expressive
 - Wider flavor profile and thus a lower drinkability (that is, tend to appeal to those with a more experienced beer palate)



Just to keep you on your toes, keep in mind that these guidelines are really general — full-bodied Dark Lagers exist just as surely as do light Mild Ales.

Still curious about dining with beer? Turn to Chapter 13 to learn more about successful beer and food pairings.

Cooking with beer

Sure, cooking with beer has been a kitchen standard for eons — if you consider dumping a can of Olde Foamy into a pot of chili “cooking with beer.” With all the new and interesting beers in the market these days, chefs and gourmards have a newfound interest in beer, and they’re flexing their fun muscles in the kitchen.



Intimidated by the thought of cooking with beer? Consider the following factors when choosing a beer for cooking purposes:

- ✔ **Color:** Beers brewed with a lot of dark grain, such as Stout and Porter, are likely to transpose their color to your meal — not an appetizing hue for fettuccine Alfredo or scrambled eggs.
- ✔ **Level of sweetness (maltiness) versus level of bitterness (hoppiness):** Malt is by far the predominant beer flavor in a recipe, but beer's bitterness increases with *reduction* (that is, the decrease in volume caused by boiling). In general, go with a mild beer rather than a bold one and avoid highly hopped beers, such as some Pale Ales. Reserve the sweeter, heavier beers (such as Belgian Tripels or Scotch Ales) for dessert mixes and glazes. **Note:** As water and alcohol boil off, both the sweet and bitter flavors of the beer intensify.
- ✔ **Other flavors:** Beers are available in a wide variety of styles, many with flavors that aren't traditionally associated with beer. You may encounter Fruit Beers, Chocolate Beers, Sour Beers, and Smoked Beers, among others. These flavored beers present many culinary possibilities in their own right, but they're just not meant for use in the average recipe.

Undaunted? Chapter 14 has good info on this topic (and some great recipes!).

Taking a Tour of Beers around the Globe

Craft and artisanal beer has gotten so popular in the past several years that people are even organizing vacations and launching spontaneous jaunts in search of good beer. In the following sections, I introduce you to the beer scenes in North America, Europe, and other spots around the world. Make your way to Chapters 15, 16, and 17 for more about beer travel.

North America

Despite beer's decidedly European roots, North American beer explorers don't have to travel very far to find good beer. People can find lots to celebrate and explore in North American breweries, beer festivals, and brewery museums. With more than 2,000 craft brewers or brewpubs now plying their trade in the United States and Canada (more than 1,700 in the U.S. alone), you can find good beer just about everywhere. The majority of these craft brewers are brewpubs where you can sample the local brew while enjoying a good meal. The same can be said for the growing number of beer bars and gastropubs that continue to spring up in urban areas.

Europe, Asia, and beyond

Although beer wasn't born in Europe, it grew up there and became the world's most popular beverage because of European brewers. Commercial brewing has been serious business in Europe since the 12th century. Since then, it's been a major European export to the rest of the world. Not just the beverage itself, but also European technology and expertise to make good beer have helped build the brewing industries in Asia and elsewhere.



You can drink well in almost all European countries, but the crown jewels of beerdom are Germany (especially Munich and Bavaria as a whole), the United Kingdom, Ireland, Belgium, and the Czech Republic. The pub culture in most of the major brewing nations is mostly intact, and a visit to practically any local bar is likely to yield a good beer discovery. In Germany, you can become overwhelmed by the sheer number of breweries that exist (Bavaria alone has more than 600), while beer trekkers in Belgium may get thoroughly bewildered by the variety of unusual beer styles served at any given bar.

Australia gets an honorable mention as a beer-drinking country, especially because it's not in Europe. Despite the deep Anglo influence on the Australian brewing industry and an occasional well-made ale, it's primarily a lager beer country-continent.

Japan, China, and Thailand owe their brewing successes to the Germans, who greatly influenced beer production and consumption in these Asian countries. In more recent years, however, the American craft-brewing industry has begun to attract interest in these Asiatic countries — especially Japan.

Brewing Your Own Beer

The world's first beer producers (around 8,000 BC) made beer at home for personal (or communal) consumption; hence, homebrewing has been around since the beginning. This practice continued well into the Middle Ages, when beer making became more of a business, although homebrewing never stopped completely. In fact, brewing beer at home is what got thousands of Americans through 13 years of prohibition, when production of alcoholic beverages was against the law.

Homebrewing is also credited with sowing the seeds of the current craft beer renaissance. Many of today's artisan brewers started brewing beer in their own homes before going pro. (It's no coincidence that homebrewing became legal in 1979, and the craft beer movement began in the early 1980s.)

Ever dream about making your own beer at home? Well you may be surprised by how easy the process is — and how great the reward. All you need is access to a good equipment and ingredient supplier, good instruction (see Chapter 18), and some patience.