

LEARNING MADE EASY



3rd Edition

Beer

for
dummies[®]
A Wiley Brand



Learn the magic of
beer making

Discover the wide world
of beer styles

Buy, serve, and
enjoy beer wisely

Marty Nachel

International beer judge and educator

Steve Ettlinger

Author and beer enthusiast



Beer

3rd Edition

by Marty Nachel and Steve Ettlinger

for
dummies[®]
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Beer For Dummies®, 3rd Edition

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Introduction

*There once was a man named Stu —
About beer, he hadn't a clue.
At the behest of his chummies,
He read Beer For Dummies,
And now he's the Master of Brew!*

Marty here. Like many people, I first discovered beer while sitting on my father's knee. My earliest recollections of the beer that Dad drank were that it was always ice cold and foamed like soapsuds — probably an accurate taste descriptor as well. Too bad Dad bought the cheap stuff.

After years of unconsciously buying the cheapest beer, like my father did, I found that my regular beer started to become regularly boring and much less appealing. By chance, a tour of a famous brewery — Molson's, in Toronto — that made fresh, tasty beer in a number of traditional styles, opened my eyes to an undiscovered world of beery possibilities unavailable in the United States at that time. Beer drinking for me would never be the same again because I had discovered the secrets to true beer happiness: freshness and variety. From that point on, I went in search of good beer and got an education in the difference between it and mediocre beer (and worse).

Learning this difference wasn't only easy but also fun — so much fun, in fact, that I now make a living doing it! But even for the casual beer drinker, a little beer knowledge can turn a possibly daunting experience into an enjoyable one. Good beer, unlike fine wine, is widely available and relatively inexpensive, but choosing among all the various styles can be a little confusing without some help. If you've fallen in love with beer, there are plenty of ways to increase your beer appreciation. This book should be of help to neophyte and serious beer enthusiast alike. And the best news is that in the United States and around the world, good beer is being produced by more brewers every day.

And that's something to drink to!

About This Book

Beer For Dummies, 3rd Edition, is a reference tool above all. You don't have to read it from cover to cover (although I won't mind if you do); you can turn to any part, chapter, or section that gives you the information you need when you need it. If you decide to read the book in order, you'll find that the information is presented in a logical progression.

Foolish Assumptions

When I was writing this book, I assumed only one thing about you, dear reader: You're looking for a resource to aid your understanding, purchasing, drinking, and all-around enjoyment of beer, whether you're new to beer and don't know much about it, or whether you're a beer enthusiast who wants to know more. You've come to the right place!

Icons Used in This Book

Icons are the pictures you see in the margins of this book. Here are descriptions of all the icons:



REMEMBER

This icon signals really important facts that are essential to know if you want to be sure you understand beer.



TIP

This icon shows pointers, suggestions, recommendations, and things to do yourself.



WARNING

As you may guess, this icon means "Don't do this!" or "Pay attention and do this right the first time!" You'll harm your beer or beer experience if you blow it.



TECHNICAL
STUFF

Text marked with this icon explains technical subjects that are important only if you're really getting into beer or you're really into technical stuff. The rest of you can easily skip these tidbits.

Beyond the Book

This book's Cheat Sheet offers useful beer descriptors, some unusual beer styles and great beer brands you should try at least once, tips for buying and serving beer properly, steps for evaluating beer like a pro, and tips for pairing beer with food. You can get it simply by going to www.dummies.com and searching for *Beer For Dummies Cheat Sheet*.

Where to Go from Here

Where to go from here? How about straight to your fridge to grab a beer before sitting down to leaf through this book.

Now, if you're new to beer, you may want start with basics about how beer is made in Chapters 2 and 3. If you're already into beer but not quite up on all the beer styles, check out Chapter 4. Do you consider yourself a foodie or a gourmand? If so, you're certain to find something of interest in Chapters 14 and 15. Are you a traveler looking for some beer-soaked adventures? Then you'll want to peruse Chapters 17, 18, 19, 23, and 24. But if you're already on your way to beer geekdom, head directly to Chapter 22 to seal the deal.

Note: Partly because beer is so widely available and partly because so many different people make beer, beer styles aren't always consistent from brand to brand. Artisanal brewers are notorious for putting their own little spin on beer styles, sometimes individualizing them to the point where they barely fit a style at all. What I've tried to do in this book is define the most important styles in everyday language, but you'll no doubt find other descriptions elsewhere that are stated differently. Descriptions mostly reflect an individual writer's perception, as a good many of the style descriptions aren't really definitive. I've followed the Beer Judge Certification Program (BJCP) guidelines as a base and added my own twist to make them more easily understood by the average reader.

If you're confused, don't worry. It's just beer, after all. Why not go have one now?

1

Getting a Taste of Beer

IN THIS PART . . .

Strip beer down to the basics and build it back up again.

Take a worldwide tour of beer and brewing.

Become hip to hops and other beery ingredients.

Walk through the brewing processes.

- » 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

Chapter **1**

Drink Up! Beginning with Beer Basics

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.

But 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, we give you an introductory tour of the wonderful world of beer: its ingredients, its styles, its uses, and much more. Cheers!

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.
- » **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 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 beer complexity.
- » **Aroma:** The piquant aroma of hops, which mirrors their flavor, is derived from essential oils in the hops.
- » **Stability:** Hops aid in the beer's 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*)
- » Lager yeast (*Saccharomyces pastorianus*)

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. We provide a quick introduction to major beer styles in the following sections; for greater detail, check out Chapter 4 and Appendix A.



TIP

Within the realm of major beer categories are some truly special brews, including real ale, barrel-aged and wood-aged beer, sour beer, cannabis 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 9 provide insight into these beers.

Ales versus lagers



REMEMBER

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 — well, they're only a few hundred years old.
- » Ales are fermented at relatively warm temperatures for short periods of time, whereas lagers are cold fermented for longer periods of time.

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 substyles. Here are just two examples of how this beer hierarchy plays out; many others are similar to these.

Stout (a type of ale)	Bock (a type of lager)
Irish dry style stout	Traditional bock
London sweet style stout	Helles bock
Foreign style stout	Maibock
Oatmeal stout	Doppelbock
Russian imperial stout	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 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 offer 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.



REMEMBER

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 10 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 consumer confusion. Chapter 11 walks you through this mine-field 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.



TIP

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 palate.) 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 reflect poorly on you.

For more tips on serving and tasting beer, have a look at Chapters 12 and 13.

Dining with beer

Wine was once the preeminent beverage on dinner tables, but 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.



TIP

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:
 - They're *generally* lighter in body and color.
 - They have a narrower flavor profile and a higher degree of drinkability. (That is, they 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:
 - They're typically darker.
 - They're rounder, more robust, and more dramatic tasting.
 - They have a wider flavor profile and thus a lower drinkability. (That is, they tend to appeal to those with a more experienced beer palate.)



REMEMBER

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 14 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 gourmands have a newfound interest in beer, and they’re flexing their fun muscles in the kitchen.



TIP

Intimidated by the thought of cooking with beer? Consider the following factors when choosing a beer for cooking purposes (and see Chapter 15):

- » **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 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.

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, We introduce you to the beer scenes in North and South America, Europe, Asia, Africa, and other spots around the world. Make your way to Chapters 17, 18, and 19 for more about beer travel.

North and South 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 12,000 craft brewers or brewpubs now plying their trade in the United States and Canada (more than 10,000 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, Africa, 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 European technology and expertise to make good beer have helped build the brewing industries in Africa, Asia, and elsewhere.



TIP

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), whereas 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.