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2nd Edition

Beer

FOR

DUMMIES®

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- Grasp the ingredients and processes that brewers use to make beer
- Buy, serve, and enjoy beer wisely

Marty Nachel

*Certified beer judge and author of
Homebrewing For Dummies*

with Steve Ettlinger

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FOR
DUMMIES®
2ND EDITION

**by Marty Nachel
with Steve Ettlinger**

Foreword by Jim Koch
Brewer, Samuel Adams Boston Lager



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About the Authors

The course of **Marty Nachel's** life took a portentous turn in 1982, when a spontaneous road trip to Toronto led to an even more spontaneous tour of the Molson Brewery. Never before had Marty tasted beer so fresh and so diverse. With that new and wonderful sensory experience, the die was cast. Life had changed for the better.

Marty went on to visit many more breweries — somewhere in the neighborhood of 250 — in North America and Europe. More importantly, he started brewing his own beer at home (1985). Not satisfied with just tasting his own brew, he chose to become a Certified Beer Judge so he could taste others' beer as well (1986).

All the while Marty was brewing beer, judging beer, and touring breweries, he also furthered his career as a freelance writer on these topics. After his first article was published in *All About Beer* magazine (1987), there was no looking back. Marty's articles began appearing in many beer and food publications — in print and online.

By 1995, Marty had scored his first book contract, writing *Beer Across America*, which was based on the newsletters he wrote for the Beer of the Month club of the same name. The following year he authored the first edition of *Beer For Dummies*, followed immediately by *Homebrewing For Dummies*. Due to the ever-growing popularity of homebrewing, the second edition of *Homebrewing For Dummies* was written in 2008.

Never one to let his taste buds sit idle, Marty kept them busy by serving as a beer evaluator at the Beverage Testing Institute in Chicago from 1995 to 1998. That same year, Marty got the call from Denver — he was invited to judge beer at the Great American Beer Festival and is now a regular there.

For several years now, Marty has been hosting beer tastings and leading beer appreciation classes as well as beer sensory classes for homebrewing groups in the Chicago area.

Always looking for new opportunities to promote good beer, Marty recently launched the Ale-Conner Beer Certification program, which allows beer enthusiasts to prove their knowledge, passion, and appreciation of craft beer. Check out www.beerexam.com.

Steve Ettlinger is the book producer/editor/agent/co-writer of more than 40 consumer-oriented books and the author of 7, most of which are food- and drink-related (he produced the best-selling *Wine For Dummies*). His first book, *The Complete Illustrated Guide to Everything Sold in Hardware Stores*, has been in print since 1988. His most recent book is *Twinkie, Deconstructed*. You can find more information on Steve at www.steveettlinger.com.

Dedication

Marty Nachel: Dedicating this book to my wife, Patti, is but one miniscule way of acknowledging her endless patience and forbearance as I've rabidly pursued my avocation these past 20-some odd years (some odder than others). For all the times she listened to me babble on about a great beer I tasted or brewery I visited or watched me jet off to another beer festival or beer junket, I owe her so, so much more.

I also want to dedicate this book to my children, Drew and Jill, both now in college. They've visited more breweries in their young lives than most people do in an entire lifetime. Mostly in the course of family vacations, I'd schedule brewery stops in between visits to national parks and theme parks. They patiently endured my mania so I might continue to pursue my love of writing about beer. I hope that someday they'll recognize snippets of their youth in the pages of my books.

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I consider myself fortunate to be one of the *For Dummies* authors. I'm indebted to book producer and co-writer Steve Ettlinger for opening the door to this opportunity way back in 1996, when we wrote the first edition of *Beer For Dummies*. Steve's focus and attention to detail helped make the book complete, but his wry wit added humor when and where it was needed most.

Grateful acknowledgments also go out to Candy Leshner, beer gourmand *par excellence*. Candy's contribution of original recipes in Chapter 14 of this book is invaluable. A huge thanks to her for lending her considerable talents and credentials to this effort. Also contributing to the success of this chapter on cooking with beer are recipe tester Emily Nolan and nutritional analyst Patty Santelli. They sure must enjoy their jobs.

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Steve Ettlinger: First of all, I'm eternally grateful to Marty Nachel for becoming my personal beer trainer, patiently explaining over and over again the intricate differences between the various beer styles. He taught me all I know about beer (my father taught me to appreciate it). I'm also in awe of Marty's sublime homebrewed beer.

Thanks to all those brewers and beverage salespeople who took time to answer my endless questions; to my sister, Betsy, and her pals for advice on beer appreciation; to my mother, Marge, for her editing as well as her testing of the beer-food recipes.

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Beer may be fun, but it took a lot of work to get here. I won't forget your help, all of you.

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Foreword

I love beer. My dad was a brewmaster, so I grew up in breweries and came to appreciate the kettles, the tanks, and the smell of a brewery. As a kid, I read the family beer recipes, which had been handed down over six generations.

In 1984, when I brewed my first batch of Samuel Adams beer, there was no need for a basic guide book like *Beer For Dummies*, especially in the U.S. Mass-produced beers had undergone 40 years of becoming lighter and blander. And beers from abroad, then the only widely available alternative, were often stale because of their long, transoceanic crossing and lengthy warehousing.

But today, beer lovers are in heaven. We are in the midst of a genuine renaissance in what's known as craft brewing. Literally hundreds of new brands and styles are crowding the shelves and the bar backs — pretty intimidating for the uninitiated unless they have a copy of *Beer For Dummies* with them. Personally, I love walking into a bar and seeing a dozen tap handles for great, interesting beer styles.

I grew up knowing that beer can have all the nobility and complexity of a fine wine, and it's fun to see more and more people acknowledging that today.

I think it has to do with education. The more you know about beer — its ingredients, its history, its brewing — the more respect you have for it. That's why I applaud Marty Nachel and Steve Ettlinger for writing *Beer For Dummies*.

In this book, Marty and Steve tell you what good beer is and how to find and enjoy it. I appreciate the opportunity to endorse *Beer For Dummies* and am sure it will entertain you, educate you, and make you thirsty for a really great beer.

Cheers,

Jim Koch

Brewer, Samuel Adams Boston Lager

Jim Koch is credited by many as the leader in the current craft-brewing renaissance. As a brewmaster, he continues a family tradition — six first-born sons in his family have become brewmasters. Jim's own experience with brewing started at the age of four, when he tasted his first beer. He loved it.

In 1984, armed with his great-great-grandfather's original recipe for Samuel Adams beer, Jim started the highly successful Boston Beer Company. At the time, he didn't dream that there'd be a market for more than one style of Samuel Adams. Today, the Samuel Adams family of beers comprises over 30 different brews.

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!

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, you have 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, good beer is being offered by more brewers every day.

And that's something to drink to!

About This Book

Beer For Dummies, 2nd 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.

Conventions Used in This Book

I include the following conventions to help you navigate this book:

- ✓ **Boldface** highlights key words in bulleted lists and action steps to follow in a specific order.
- ✓ New terms and emphasized words are in *italics*.
- ✓ Web addresses appear in `monofont`.

When this book was printed, some of the web addresses I mention may have broken across two lines of text. If that happened, rest assured that I didn't include any extra characters (such as hyphens) to indicate the break. If you want to visit a website whose web address has been broken, just type exactly what you see in this book, as though the line break didn't exist.

One more note: You may notice that two names are on the cover of this book, yet the text is written in first person. Much of what is written in this book is anecdotal, opinionated, and based on personal experiences. Expressing these passages in a singular voice is much easier than attributing them individually to Steve or Marty.

What You're Not to Read

If you're in a hurry, feel free to skip any text that's marked with a Technical Stuff icon or featured in a sidebar (a shaded gray box). This information is interesting and sometimes entertaining, but not critical to gaining a deeper understanding of beer (unless you thrive on trivia and minutia).

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!

How This Book Is Organized

The first parts of this book are for people who have just discovered the world of quality beer and who may want to get a little background or check out some specific information about beer — or carry on an intelligent conversation with someone who happens to be a beer nut. The latter parts are more oriented toward those of you who have caught the beer bug or have gone completely nuts about beer. Ultimately, this book is a guide to increasing your beer drinking pleasure, from broadening your choices among the many styles of beer to opening your eyes to beer-related fun, like homebrewing or beer travel.

Part I: Getting a Taste of Beer

These three chapters are meant to answer the first questions that most people who are new to the world of beer tend to ask.

- ✓ Chapter 1 lays the groundwork for understanding and appreciating beer in its many forms. You should probably take the time to read this chapter.
- ✓ Chapter 2 is all about the ingredients needed to brew great beer — and odd beer as well. You'd probably never expect the ingredients in some beer.
- ✓ Chapter 3 aims to answer the basic questions about how beer is made. Many drinkers are just plain curious, but you may want to know this stuff because beer labels and menus often mention the brewing process.

Part II: Taking a Look at Beer Styles — Old, New, and Revived, Too

For anyone who's just starting to learn about beer, this part is pretty important. Not only are all the old beer styles explained in detail, but also all the hot new beer styles and trends are given ample attention.

- ✓ Chapter 4 describes the most popular beer styles and defines the basic terms you see or hear used around beer. This chapter should help you make your first choices without being intimidated. It's really essential reading.

- ✓ Chapter 5 goes to great depths to demystify *real ale*, which is an old and traditional British form of serving beer that's rapidly gaining in popularity in the United States and elsewhere in the world.
- ✓ Chapter 6 points out that aging in wood is no longer the sole province of wineries and distilleries. This chapter is all about beer aged with wood.
- ✓ Chapter 7 attempts to describe and explain the nature of extreme beer. Curious about what qualifies as *extreme* beer? Read this chapter.
- ✓ Chapter 8 makes the lives of beer drinkers easier who, for various reasons, can't drink the same regular beer as most of us; you find out about organic, gluten-free, and kosher beer in this chapter.

Part III: Buying and Enjoying Beer

This part is where I make sure you get what you pay for. Beer is a perishable food and has to be shipped, stored, and sold as such. Often it isn't, making your life as a beer consumer fraught with perils — until you find the answers in this part.

Some beer lovers come dangerously close to being snobby about beer, almost like (shudder!) wine snobs, but this part helps you sort out the really important stuff to know about the enjoyment of beer (which is actually a very complex subject).

- ✓ Chapter 9 gives you the tools you need to shop for beer with confidence.
- ✓ Chapter 10 gets into the specifics of labeling laws and mysterious label lingo, while cutting through marketing department guff and bluster.
- ✓ Chapter 11 explains that there's a lot more to serving beer than you think.
- ✓ Chapter 12 is probably the most serious because tasting jargon is serious. Tasting beer isn't serious business, though. The bottom line: If you like it, it's good.
- ✓ Chapter 13 opens your eyes to the world of beer and food, a world that's easily enjoyed. Beer and wine comparisons and substitutions are covered in detail here.
- ✓ Chapter 14 shows that cooking with beer is not only easy but often more satisfying than cooking with wine. Recipes are included.

Part IV: Exploring Beer around the World and at Home

This part is for people who like to move around a bit. Your own local bars and homes aren't the only places to enjoy beer — this part gives you plenty

of ideas for places around the world to explore and enjoy. But if you do like to hang around your home, consider brewing your own beer there.

- ✓ Chapter 15 covers the best places to find beer in North America, including beer bars, brewpubs, gastropubs, beer dinners, and festivals.
- ✓ Chapter 16 takes you on a trip to experience beer in far-flung places, such as Europe and Asia.
- ✓ Chapter 17 shows how easy it is to take a beer vacation — just leave the planning to others.
- ✓ Chapter 18 leads you by the hand as you brew your very first batch of beer, made from a just-add-water kit. As it happens, the same steps form the basis for brewing on the intermediate level with more ingredients and directions — covered in step-by-step fashion.

Part V: The Part of Tens

The Part of Tens is a *For Dummies* series tradition, and this part is where you can find new and different ways to increase your appreciation of beer, useful information about great beer cities around the world, as well as insider information on some of the biggest and best beer festivals that beer lovers can (and maybe should) attend.

Part VI: Appendixes

This part is the basic resource for all that is beer. Appendix A is loaded with information about beer styles, beer alcohol contents, and examples of commercial beers for each style. Appendix B provides a somewhat brief history of beer — from the hypothetical explanation of its discovery to the renaissance we're currently enjoying.

Icons Used in This Book

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



Text marked with this icon tells funny, intriguing, or just plain interesting beer trivia or lore. It's entertaining but also may be educational. This stuff is excellent material for beer-bar banter, if you're into that kind of thing.



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



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



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.



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.

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 13 and 14. Are you a traveler looking for some beer-soaked adventures? Then you’ll want to peruse Chapters 15, 16, 17, 20, and 21. But if you’re already on your way to beer geekdom, head directly to Chapter 19 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. Please go have one now!

Part I

Getting a Taste of Beer

The 5th Wave

By Rich Tennant



In this part . . .

They say you have to learn to walk before you can run, so before you run to your local beer retailer, it may be a good idea if you walked through this part. This part is where the mysteries of beer are unraveled: what beer is made of and how it's made. These chapters lay out the basics you need to be comfortable as you pursue your new hobby — that is, beer drinking.

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
-

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.