

Chapter 1

A Crash Course in Cheese

In This Chapter

- ▶ Discovering the origins of cheese
 - ▶ Getting a background on cheese basics
 - ▶ Learning the health benefits of daily dairy consumption
 - ▶ Recognizing cheese as a global food
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It's hard to believe that something as complex, delicious, and diverse as cheese is made from just a few key ingredients. Thousands of different varieties of cheese are produced around the world from the milk of cows, goats, sheep, water buffalo, yaks, camels — even reindeer and horses. Depending upon the country, this ancient food can hold significant cultural, nutritive, and economic value.

In this chapter, we give you a brief overview of cheese: its history, why it's good for you, where it comes from, and a few other basic nuggets. Consider the info here just enough to whet your appetite; you can find more detailed information on each of these topics and a slew of others in the upcoming chapters.

Accidents Happen: How Cheese Came to Be

We'd love to be the ones to provide a definitive answer to the much-debated question of how cheese was discovered. But the truth is, historians and archaeologists don't have any conclusive evidence on who first made cheese, or where. The origin of cheese is believed to have occurred during the Neolithic period (beginning some 12,000 years ago), although some experts suggest it predates recorded history. Things are equally murky as to where said cheese was produced: Europe, Central Asia, North Africa, or the Middle East.

From oops! . . .

The most commonly held theory on the origin of cheese suggests that an Arab nomad unwittingly created the first batch of cheese after discovering the milk he'd stored in an animal-stomach bag (most likely that of a sheep) had curdled.

The idea certainly makes sense. After all, cured animal skins and organs were frequently used as vessels or containers for food and water, and the stomach lining of young *ruminants* (cud-chewing mammals) such as sheep, goats, and cows naturally contain *rennet*, the enzyme used to make cheese.

Thus, milk stored in an animal stomach, jostled around during a long day or days of traveling, and subject to a hot climate could very well result in the formation of cheese. But let's face it: Folks have been letting milk ferment for thousands of years, so it's very possible that cheese was "discovered" multiple times throughout history, in different parts of the world.

. . . To ahhh!

While there's little doubt that cheese was first made or (more likely) discovered when milk, carried in a bag made from an animal stomach, curdled into cheese, intentional cheesemaking is believed to have originated with the domestication of sheep and goats, between 8,000 and 3,000 BCE. Some research shows the ancient Sumerians were the first to intentionally and systematically make cheese. Egyptian and Mesopotamian hieroglyphics also include cheese (we'd hate to depart for the Underworld without it, too).

However it came to be, cheesemaking today runs the gamut from humble subsistence food to culinary art form (with all due respect to Da Vinci!).



Crafting a high-quality cheese requires more than just good milk. Also needed is an understanding of microbiology, chemistry, and *affinage* (aging), as well as a well-trained palate. Even with these skills, a controlled environment is still an essential part of the cheesemaking process: you need to be able to create a consistent product (which may or may not have seasonal variations depending upon what the animals are eating; see Chapter 2) that is largely based upon stable and hygienic conditions.

Hankering for a hunk of cheese: The cheese industry today

Until the early 1980s, cooking for a living wasn't necessarily deemed a particularly impressive occupation in the United States. In the early and

mid-part of the 20th century, line cooks were traditionally former convicts, societal misfits, the uneducated, or down-on-their-luck loners. Hard to believe, right?

Today, culinary schools are filled to capacity, and kitchen work — one of the more stressful, unglamorous jobs imaginable — has a high-profile status attached to it. Since the era of the celebrity chef began, other food-and-drink-related occupations have joined the ranks of coolness: winemakers, farmers, craft brewers, coffee roasters, distillers, mixologists, *charcuterers* (makers of cured meat products), butchers, and cheesemakers. Skillfully growing or crafting a beautiful, delicious product from the most humble of ingredients is now recognized and celebrated as a viable career — something we find really exciting.

Cheesemongers are also having their moment. Walk into a cheese shop in Brooklyn, Seattle, San Francisco, or Chicago, and you'll see that slinging dairy products is currently the hipster career of choice. We're poking fun, but it's really true that the cheese industry has, in the last five years, attracted the kind of alternative, Gen X/Y following currently saturating the restaurant, small farm, and artisan food industries.

What does this mean for the future of cheese, besides greater demand for mongers? Well, it means cheese has finally achieved a level of recognition and appreciation heretofore unseen in the United States. There's even a Certification Exam for Cheese Professionals established to set standards of accreditation within the country (to find out more about this, go to www.cheesesociety.org/events-education/certification-2).

In addition, consumers are growing increasingly savvy about artisan cheeses, and it doesn't appear their appetite will be sated anytime soon. Cheese shops are springing up across the nation, and with them, greater demand for cheese-related occupations such as buying, distributing, and cheesemaking. You'd be surprised how many mid-life career changers out there have ditched an urban, corporate existence for a herd of goats and a cheesemaking vat. While not all of these folks are successful, their intentions prove that there's just something about cheese that nourishes both the body and soul.



Americans aren't just curious about cheese; they're crazy for it. The total cheese consumption per capita in the U.S. increased from 23.81 pounds in 1989 to 32.9 pounds in 2009 — and it's still rising.



Those hipsters behind the cheese counter? Don't dismiss them as a pop culture cliché. Here's why:

- If they're working at a serious cheese shop or counter, odds are they're highly trained and very knowledgeable about not just cheese, but food in general. They can likely tell you the best cheeses to use for specific recipes and what techniques work best, or how to pair that \$40 per pound, 5-year aged domestic Gouda with a wine, craft beer, or whisky that will do it justice.

✓ Unlike the wine industry, which until fairly recently had a reputation for pretense, the incoming generation of cheesemakers and cheesemongers are more interested in making good cheese accessible to everyone — not just those who can afford it. These younger industry employees are likely on a tight budget, and they're just as happy to steer you toward a great, affordable snacking cheese or give you some wallet-friendly advice for your next dinner party. Likewise, cheese shops and counters that cut-to-order offer consumers a chance to taste a range of different varieties without spending a lot of money.

In Part II, we tell you everything you need to know about purchasing cheese, from where and how to buy it to what to tell the cheesemonger to ensure that you get something that suits your taste.

Key Things to Know about Cheese

The cheesemaking process has changed little over the centuries, despite increased knowledge about microbiology and chemistry. Cheesemakers are, in essence, like chefs, with a multitude of recipes at their fingertips. Their most important decisions, however, are what type of milk to use (cow, sheep, and goat milk are the most common) and how to ensure that milk is of the highest quality. In this section, we highlight some important general points about cheese. Head to Chapter 2 to find out about cheesemaking, from milk to mold (which, in this industry, is usually a good thing).

It's alive!

Cheese is a living product, because of the cultures, mold, and bacteria it contains. This is why it continues to ripen as it ages (and why storing it properly is important). A sheep's stomach may have worked well for storage back in the day (refer to the earlier section "From oops!..."), but for your health (as well as the best-tasting product), keep your cheese refrigerated and wrapped up. Chapter 7 has more information on storing cheese.

Styled out

Every style of cheese — fresh, semi-soft, washed rind, blue, semi-firm, or hard — has its special characteristics and properties, which are developed by making specific adjustments during the cheesemaking process. In Chapters 2, 3, and 4, we discuss what makes one cheese different from another.

The *rind* of a cheese is its skin. It's an important part of the cheese that's the result of bacteria and molds used during the cheesemaking process; these same microorganisms also work to create a specific style of cheese as dictated by the cheesemaker. The rind also protects the cheese so that it can age. With certain styles, such as surface-ripened cheeses, the rind is the actual mold that ripens and flavors the entire wheel, making it crucial to the end product.



The Internet is home to some great cheese resources. Check out the following:

- ✓ **culture: the word on cheese:** Yes, that's us, but we're not shy! The **culture** online library profiles an extensive compendium of cheese varieties, compiled by our team of experts (www.culturecheesemag.com).
- ✓ **American Cheese Society:** The American Cheese Society (ACS) is a professional industry organization that's also open to consumers (www.cheesesociety.org).

It has its own language: Speaking cheese geek

Cheese is a complex subject, without a doubt. But the really difficult, technical stuff comes with its production. We provide you with the basics of cheesemaking in Chapter 2 so that you're able to develop a working knowledge of how it's made and the vocabulary that goes along with it. After all, you never know when you'll need to say, "I think this surface-ripened could have used a bit more *Geotrichum*." We kid.

What's more important for you, as a cheese lover, to know is the terminology associated with the different styles of cheese and types of rinds. We break all of that information down for you in Chapters 2, 3, and 4. Even if you don't commit these things to memory, as long as you know what qualities you like in a cheese — buttery, sharp, stinky — your cheesemonger can help you select something that you'll enjoy.



What if you don't *have* a cheesemonger? We understand that's most often the case. After reading Chapter 5, in which we explain how to use your senses to evaluate cheeses, you'll not only know what flavors and textures you like, but what types of milk and styles you prefer (to help you along, we also offer you suggestions on what to try the next time you're shopping for cheese). Even without a cheesemonger present, as long as you know you want a stinky cheese or a strong blue, you'll know what styles or key words to look for.

The point is, *don't be intimidated by cheese*. As cheesemongers, we get a lot of customers who feel uncomfortable selecting a cheese for various reasons, and there's no reason for you to feel that way.



If you don't know how to pronounce the name of a foreign cheese, don't sweat it. Most cheesemongers aren't fluent in French/Italian/Spanish/German either, and we've all had to learn the correct way to say the names of certain cheeses. If you don't want to make a stab at it, all you have to do is point to the cheese in question and ask something along the lines of, "Could I please try some of the French cow milk cheese in the lower right corner? How do I pronounce that, anyway?" Your cheesemonger will be more than happy to comply. We do provide pronunciation tips on some of the more esoteric cheeses in this book, but there are cheese books written with language skills in mind. One we recommend is *The Cheese Lover's Companion* (HarperCollins), by Ron and the late Sharon Tyler Herbst.

You can enjoy it in a variety of ways

As we note earlier, one of the many truly great things about cheese is its diversity: in style, type of milk, flavor, recipe, and production method. Another great thing about cheese is its accessibility. You don't need to spend a lot of money, own a passport, or be a certain age to enjoy a great cheese, nor do you require any prior knowledge or cooking ability whatsoever.



Anyone can slice off a hunk or put together an impressive cheese plate. (Don't believe us? Turn to Chapters 7 and 15.) Cheese is an equal opportunity food, as well as an ingredient that can enliven everything from bread or salad to soups and dessert, as we show you in Chapters 17 and 18. You can also make fresh cheese yourself, even if the closest you've ever been to a cow is the milk in your latte (look at Chapter 19 for instructions and encouragement).

Ten reasons to eat some cheese, right now

As if you *need* a reason (especially after reading about the nutritional benefits that follow)! But we understand that cheese can be both a financially and calorically detrimental habit. So in case you need that extra nudge, here are some of our favorite reasons to buy a hunka:

- ✓ Your cholesterol test results were fine.
- ✓ It's finally tomato season.
- ✓ It's Monday.
- ✓ It's Wednesday.
- ✓ A friend has a bottle of 1982 Dom Perignon and doesn't want to drink alone.
- ✓ The dentist said, "No cavities."
- ✓ You met your deadline.
- ✓ Housewarming gift — to yourself.
- ✓ It's spring (kidding season!), and your favorite cheese shop just received the first local chèvre of the year.
- ✓ You need to increase your calcium intake — doctor's orders!

Cheese! To Your Health

Cheese gets a bad rap for its high saturated fat content, and as a result, calorie counters often shun it — or substitute its plasticky, bland, low- or non-fat equivalent. Guess what? The health benefits of cheese and other dairy products far outweigh the drawbacks, and studies show that a moderate amount of dairy in your diet helps contribute to the prevention of tooth decay, as well as lowers cholesterol and promotes weight loss. Here are the details:

✓ **It inhibits tooth decay.** Studies from the beginning of the 1990s show that the casein and whey proteins in cheese actually inhibit tooth decay, as well as strengthen teeth and help to restore enamel. Cheese also increases the flow of saliva, which washes away acids and sugars that contribute to tooth decay. Don't ditch your toothpaste, but eating a small portion of semi-firm cheese after a meal is beneficial to your teeth and gums.

✓ **It's loaded with good stuff.** Cheese is an excellent source of calcium, phosphorous, vitamin A, and protein. High protein foods take more energy to metabolize, which assists with weight loss.

In general, goat milk contains more vitamins A and D than that of cow or sheep, but cow milk is higher in folic acid and zinc. Sheep milk has significantly more vitamins B2 and B12 and more conjugated linoleic acid (CLA) than goat or cow milk. In other words...eat 'em all!

✓ **It helps prevent certain diseases.** Many cheeses are high in *conjugated linoleic acid* (CLA), which lowers cholesterol and helps prevent hypertension and diabetes. CLA and Omega-3 fatty acids are higher in cheese made from animals that have grazed exclusively on fresh grass. CLA levels are also more significant in certain types of cheese such as fresh, surface-ripened, and alpine styles. The nutritional value also varies depending upon the type of cheese and animal species it comes from.

✓ **What about its salt content?** Salt is a necessary ingredient in cheese production, as we explain in Chapter 2, so if you're really trying to cut sodium out of your diet, you might want to skip the cheese (remember, too, that salt adds flavor, so a cheese devoid of any would be pretty bland).

Parmigiano Reggiano is a lower sodium variety that's very versatile and full-flavored, so it's a win-win. It's also lower in fat because it's made with partially skimmed milk.



A food writer and registered dietician friend of Laurel's once said, over a plate of Parmigiano Reggiano, "Everything in moderation. Including moderation." We agree. Immoderately.

Budget Travel: Exploring the World through Cheese

Cheese is one of the most universal foods. It's made and/or eaten on every continent except Antarctica, and most cultures eat dairy products in some form. We take you on a tour of the cheesemaking areas of the world in Part III.

Because cheese is so ubiquitous throughout the world, it makes for both an excellent armchair travel companion, as well as a fun way to explore other cultures when you're on the road. With the proliferation of more specialized cheese distributors, esoteric imports (such as Paski sir, a delicious, hard sheep milk cheese from Croatia, or sheep milk feta from Australia) are available here in the United States, as are excellent pasteurized versions of "benchmark" cheeses such as Brie or camembert. Also available are incredible domestic cheeses coming from dairies with just 50 goats or 5 cows, and fine, clothbound cheddars produced in volume.

Flip through Part III to take a brief tour of the global cheese scene. You'll be inspired to try cheeses from all over the world or, if you're already a traveler, to discover cheese-centric destinations that may inspire your next jaunt (**culture: the word on cheese** highlights cheese-centric destinations in every issue).



At the risk of sounding redundant, cheese is one of the few foods that's able, through a bit of organic and human-assisted alchemy, to truly provide a sense of place (much like wine). As you discover more about how cheese is made and as you try more cheeses, you'll discover seasonal variations and subtle flavors that hint at the cheese's origin (think of cows grazing on wild onion; goats browsing wild herbs; pasture grass growing from soil rich in minerals; wheels of cheese aging for months or even years in a natural limestone cave).

Or if that's more geeked out than you care to get, just grab a glass of wine, a cold beer, or a dram of Scotch (see Chapter 16), and enjoy it with a nice wedge of cheese and some fresh bread — using our pairing tips. The cheese — and the choice — is up to you.