



## Introduction

WHEN PEOPLE HEARD THAT I WAS WORKING ON a book about sweets, they assumed one of two things: I was either producing an exposé on junk food or creating one of those beautifully photographed dessert books. Neither could be further from the truth, since I am a firm believer in consuming king-sized chocolate bars and hardly a gourmet. What fascinates me, rather, is our relationship with sweets. The truth is, the sweets we enjoy are rarely the immaculate cakes gracing glossy magazines or the shrink-wrapped stuff of vending machines. For most of us, sweets consist of a little of both and plenty in between. They permeate every aspect of our lives and, in doing so, raise a litany of questions: Why are some of us cookie snackers and others potato chip eaters? Why are certain sweets denigrated as garbage while others, with equal amounts of sugar and fat, are cherished as luxurious treats? And why do I always have room for dessert?

As all these questions accumulated, I began to collect clues that shed some light on these topics—notes from interviews I’ve conducted as a magazine editor, articles ripped from newspapers,

insights from books, random theories scribbled on the back of a press release. It all started as a lone folder marked “sweets,” which then grew to fill out my filing cabinets and shelves. Eventually I decided to give this collection of factoids and ideas some semblance of organization. This is how the book came to be.

I’VE ALWAYS HAD a fixation with sweetness—not simply the taste itself but also how we perceive and react to it. Chapters 1 and 2 explore the nature of those reactions: Why are some of us able to refuse a tray of fresh-baked chocolate chip cookies, just because we’re not hungry, while the rest of us can’t say no? Why are certain chocolates relegated to the drugstore shelves, next to the AA batteries and plastic sunglasses, while others are worthy of beautiful boxes and welcomed as gifts? It used to surprise me that the same sweetness in seemingly similar contexts can trigger such different responses, but after visiting sensory specialists, professional food tasters, and trend researchers, I realized that taste isn’t simply about the tongue at all. Each taste experience is an elegant orchestration of all the sensory organs working together, with our brain guiding the whole affair. It’s a complicated enterprise, loving the foods we love.

When it comes to sweets, we don’t dole out our affections indiscriminately. We can be very selective. Nuances are important, so much so that even the humblest of restaurants might offer two or three or more different types of sweeteners, all recognizable by their white, pink, blue, yellow, and brown packets. In contrast, it’s a rare spot that offers an army of vinegars on the table, though different brands also have subtle differences in flavor. Sweet condiments are among the few things we request by their brand name, as in “Please pass the Equal.” This is not the same as “Please pass the Kleenex,” a

case where a brand name has morphed into a generic term. When we ask for Equal, we are being very specific about what we want our “sweet” to taste like—something we almost never have the opportunity to do with our mustard, barbecue sauce, and olive oil.

But then again, in the grand scheme of things (and by this I mean not simply the food industry or the restaurant scene, but the planet itself), the taste of sweet is special. If I gathered as much as I could in the thick forest behind my old house and sampled everything that sprouted from the ground or on trees, most of it would taste bitter or sour; the non-plants, like stones and soil, would probably be salty. I can only imagine, then, what a happy surprise an early hunter-gatherer would have had when she stumbled across the taste of sweet after a long search for edible food—a look of sheer joy, I would expect, like the look my friend’s daughter gave when she took her first bite of chocolate cake on her first birthday. That look, her pastry chef father explained to me, was as if she were thinking, “I can’t believe something this good was kept secret from me for so long!”

For hundreds of centuries, sugar, the current gold standard of what sweetness should taste like, was kept secret from most of the world too. Its crystals lie hidden in simple foods that taste sweet, such as honey, maple and palm syrup, fruit, and other plants, including sugar beets and sugarcane. Going by the scientific name *sucrose*, a sugar molecule is in fact two simple sugars, glucose and fructose, linked together. Simple sugars are compounds of carbon, hydrogen, and oxygen, with the latter two always in the same two-to-one ratio as water. They are sweet in and of themselves; but linked together, they produce an entirely different, more complex, sweet nirvana. Sucrose is sweeter than glucose but milder than fructose. It gives food moisture and texture while it enhances quietly, invisibly, leaving the fundamental flavors of that food intact.

The sucrose we enjoy today is taken from the juice of sugarcane and sugar beets. The older source—and the source that constitutes 70 percent of the world's sugar production—is sugarcane, of which *Saccharum officinarum* is the most important.

An unexpectedly oversized member of the grass family, it can grow as tall as twenty feet and as thick as two inches in diameter. As sturdy as it sounds, it's also sensitive about its surroundings. Sugarcane demands nutrient-rich soil, brilliant sunshine, and decent moisture. In order to experience its sweetness, one cannot simply pluck or pull, as one would a fruit. The cane must be cut with blades, and you must extract the sucrose-containing liquid quickly and carefully because the cane is fragile and, when cracked, is prone to spoilage. You then boil the juices to produce the syrup, which is, in turn, cooled and boiled several more times until finally you are left with a yield of sweet white crystals. Molasses is the syrup that's extracted from boiling, and with each successive round of the refinement process, its color gets darker as the sugar gets whiter. Brown sugar is sugar that has undergone an abbreviated refining process. Although these days, with an eye for consistency, the beige tabletop crystals are sometimes refined completely, and molasses is added back in. Either way, for the perfect, purest sweetener, timing and temperature are of the essence. It must be hot enough to allow the impurities to evaporate, but not too hot so as to burn the whole concoction.

Understandably, it took some time before humans looked beyond obvious appearances and discovered the taste inside. The first sugar eaters simply sucked and chewed on the cane plant, letting the sweet juices wash over the palate. The juice is 15 percent sucrose—four to five times less sweet than dried dates or honey, but undeniably purer, giving no hint of fruitiness or waxiness or woodiness.

Historians suspect that sugarcane was cultivated in New Guinea

before 8000 B.C. and spread in several directions in the millennia that followed, perhaps arriving in the Philippines and India around 6000 B.C., and then later in Indonesia, though it may have been cultivated independently there as well. The plant seems to have stayed put for a long while, until probably the third century B.C., when it was brought to southern China from either Southeast Asia or eastern India.

Back in those very early years, it was the sweet juice that was savored. The *Ramayana*, a Sanskrit epic dating to about the third century B.C., describes the city of Ayodhyā. The water there “was sweet as the juice of the sugarcane,” we’re told. A southern Chinese poem, written about the same time, lists a number of remedies for nursing a dying king to health; among them was “roast kid with sugarcane sauce.” Sailing along the Indus River through India in 327 B.C., Nearchus is believed to have noticed “a reed . . . [that] brings forth honey without the help of bees.” Little did he know that the real prize had yet to be discovered.

Exactly when crystals were first isolated from the juice is a point of contention among historians because sweet substances also come from other plants. It’s likely that the discovery occurred in the first century in India, if notes from Dioscorides are to be believed. While visiting the subcontinent, the Greek physician and botanist described a “concreted honey” that comes from reeds and is “like in consistence to salt.” Better evidence of the existence of sugar in its crystallized form doesn’t appear until A.D. 500, in a Hindu religious text. Whatever the truth may be, there’s no doubt that the labor involved in securing decent amounts of table sugar required a clever mind and an able body. I can’t help but think that this is nature’s way of protecting the sweet precious crystals—or of protecting us from ourselves.

After all, once we discover a favorite sugar fix—and we all have one, whether it’s a piece of fruit or a candy bar—we grow

very attached to it. Sweets have always had a special place in our minds and in our hearts. And for Americans, it is the only taste that we imbue with all that is good. Bitter, salty, and sour suggest surly characters; umami registers no personality at all. But with “sweet” as a descriptor, the person in question glimmers with goodness and possesses instant appeal. *Sugar*, from the Sanskrit *sakara*, or gravel, has been turned into a term of affection, as have *honey*, *sweet pea*, *sweetheart*, and *sweetie pie*. Marketers have taken advantage of sugar’s sweet tug on our emotions. We have a beauty line named Sugar, a cell phone known as Chocolate, a magazine called *Cookie*. At the fanciest restaurants, we have smoked salmon and cream cheese balls parading as lollipops. When food makers deliver healthy ingredients, their concoctions often take on candy shapes and textures, as is the case with granola bars, cough drops, and nicotine gum. Sweet-natured creations tend to have a built-in allure. Chapters 4 and 5 explore the reasons behind this.

Physiologically, the taste of sweet is so appealing that some suspect it may even be addictive. Emotionally, the pull may be just as persistent, or even more so. Certain sweets, after all, offer us a taste of lost youth. In my particular case, my childhood home brimmed with blue tins of Danish biscuits and fat jars of crystalline rock candy sticks. From Sunday breakfast to the afternoon snack to dessert, sweets were a reason to take a breath and linger a while. One of my favorites was a pancake my mother would fashion out of the dough left over from making dumplings. She’d stuff it with peanut butter and serve it hot from the pan, chewy inside and crispy outside, with a sprinkling of sugar. It was delicious—but more than that, it extended the pleasures of the family dinner.

Not surprisingly, I now can’t help having a special affection for sweets and the people who love them. By this I do not mean the “I’ll just have a small bite of yours” types, the sharers, or the fruit plate eaters. I’m referring specifically to the intrepid ones, those

who take the lead and say, “Let’s order dessert!” and those who insist on a plate each, if not more. To me, dessert is flush with symbol and meaning, and to embrace dessert is to embrace the child within.

Not everyone agrees, of course, and health-obsessed eaters have spent years trying to eliminate sweetness in their daily routines. It hasn’t worked. The lure of sweet seems to have the nine lives of a cat—every time it comes close to being snuffed out, it tiptoes back into our routine when we least expect it. We might hunt down an ice cream with less sugar for an afternoon snack, but we end up taking it in, naively, the next morning for breakfast in the form of newfangled yogurt flavors like caramel and vanilla crème. We might avoid sugar in our breakfast cereal, only to give in to it, unwittingly, with a dessertified morning latte. We might choose sugar-free sodas, but caloric sweeteners slip right back into the bottle as flavored waters, sports drinks, iced green teas, and fruity martinis. Despite our ever-growing efforts to diet, the average American consumed more candy in 2006 than he or she had in the past seven years: 25.5 pounds of it. And as our total consumption of caloric sweeteners has leveled off a little, we’re each still consuming 99.2 pounds of sugar and other caloric sweeteners such as high-fructose corn syrup every year, and spending about \$12 billion annually on packaged sweet baked goods. A few years ago, at the height of the low-carb Atkins diet craze, lines were still snaking out of the best chocolate shops and bakeries.

Chapters 6, 7, and 8 examine our collective response to this incredible force of nature: Do we, as members of a nation, economic class, or social group, embrace it or fear it? On this side of the Atlantic, sweets don’t make us feel so good sometimes, and I’ve always been astonished by the way sweets can render us out of control and sick with remorse. Though I’m always ready to forgive that brick of a chocolate cake for my transgressions, I’ve also become

suspicious; matters have only worsened in recent years, as headlines continue to implicate something so cherished in history and in my childhood as the culprit behind a litany of social ills, from bad behavior in the classroom to belly fat. I miss the all-out enjoyment of sweets, but more so, I miss the rituals and flavors that are made possible by them—and that are slowly disappearing because of our attempts to push sweets away.

In the past couple of years, well-meaning skinny people, alarmed at the plumpness of our cupcakes, among other things, have taken the liberty of offering diet advice from faraway lands. Mireille Guiliano, CEO of Cliquot and author of *French Women Don't Get Fat*, revealed to the *Today* show audience that she does indeed eat chocolate, but only one piece (or maybe it was two—in any case, it was not the entire bar, as I am accustomed to) per day. Naomi Moriyama, author of *Japanese Women Don't Get Old or Fat* and a marketing consultant in luxury goods, quotes her mother, who instructs: “Food should be eaten with the eyes as well as the mouth. Serving food is like painting a picture. Food should be arranged like exquisite jewelry.” These are both admirable notions, to be sure. But for people like me, who count the massive mess of a cinnamon roll at the airport Cinnabon as one of the joys of traveling, any advice concerning small portions or satiation-by-sight does not work. I prefer my helpings large and sloppy, so I can fill my mouth, so it's hard to speak, so I can taste it better. If the sweet is small, like a petit four, then I would like at least a few on hand, please, so the pleasure is sustained, and so I can make sure it's as good as I thought it was the first time.

IT'S HARD TO comprehend living in a world without sugar, but somehow our ancestors managed. It wasn't until around the sixth century that the Persians discovered sugarcane in the Bengal

region of India. With the help of irrigation systems, the cane flourished in their homeland both in Makran, near India, and the Euphrates-Tigris delta, before farmers carried it inland and northward. In the hundreds of centuries that followed, the taste for sweetness became inextricably linked to a quest for power. In 632, when Mohammad and his Arab devotees launched their pursuit of a global Islamic state, they also spread a taste for sugar. They encountered sugar for the first time when they invaded neighboring Persia and liked it so much that they brought it along with them, disseminating it throughout the population with each subsequent victory, just as they did with the teachings of the Koran. Between the seventh and twelfth centuries, Islamic rule expanded to Palestine, Syria, Baghdad, Egypt, Morocco, Sicily, Spain, Cyprus, Crete, and Malta—and so did the taste for sugar and the business of growing and producing it. When the conquest came to a halt and the local cane manufacturing eventually faltered, the people's penchant for sweetness remained.

Sweetness spread throughout the rest of western Europe with the Crusades in the eleventh century, as Christian soldiers became more exposed to the white crystals in the lands occupied by their Turkish enemies. They liked this unusual "spice" so much that they sought out a direct route to the eastern spice kingdoms and eventually created a powerful sugar empire of their own in the New World.

The English may be famous for their sweet tooth, but it was the Spanish who brought sugar to America. In 1493, upon the request of King Ferdinand and Queen Isabella, Christopher Columbus hauled cane from the Spanish-ruled Canary Islands to Santo Domingo, where the plant was then cultivated. It wasn't long before the English, Dutch, and French established their own sweet-producing colonies. But with large plantations in Barbados (settled in 1627) and Jamaica (established in 1655), an enormous

influx of slave labor from Africa, and a voracious appetite for sugar to match, the British ultimately dominated the trade. Sugar had turned into a kitchen staple in England by the middle of the eighteenth century, and in America a century later.

Upon getting their hands on the same sweet white crystals, people from different parts of the globe chose to do very different things with them, depending on their particular historical, political, and geographical circumstances. This book explores the consequences of some of these decisions. For instance, when the French vanquished the royals, the royal help, too, lost their jobs. Among the newly unemployed were chefs, who subsequently turned their attention to creating complicated pastries for an already established aristocratic class. Certain parts of China had their share of urban elites, too, but not many cows. The consequent lack of dairy products (milk and butter) essential to rich European pastries led the Chinese to lighter buns and cakes that were delicately steamed over the stove, since ovens, too, were rare. For the nomadic Turks in the eleventh century, the absence of ovens meant a steady diet of flatbread, cooked on a griddle; to add some variety, not to mention thickness, someone ingeniously came up with the idea of a layered pastry.

And so, this is, in part, why we enjoy a dessert of *crème brûlée* in our neighborhood French bistro, why we see light-as-air sponge cakes through the glass showcases of Chinatown bake shops, and why we pick up *baklava* from our favorite falafel joint. Sweets provide a window into the lives of those who created them, and they're our connection to the past.

OUR SWEETS ARE still evolving, faster than I had anticipated and fueled by more factors than I had imagined. I soon realized that

what I've ended up recording is a mere moment in time—a compendium of my personal musings and a record of the discoveries that resonated most for me. The final two chapters of the book explore two of what I think are the most intriguing areas of that evolution-in-progress. These are areas where experts, prompted by the health-consciousness of the times, are asking: How can the taste of sweet be healthier? How can healthy foods taste sweeter? Chapter 9 explores the ever-increasing varieties of artificial sweeteners and why we're still uneasy about them. Chapter 10 looks at how at least one nutritionist hopes to use sweetness to our advantage. A shift in attitude can be swift. In the case of chocolate, a compound found by scientists to impart health can cast a new and wholesome light on an entire category of sweets. But as answers are found, new concerns arise: If, say, we make our vegetables sweeter, will an appreciation for bitterness be lost in future generations? And will the appreciation for the pure taste of sugar—whose intensity is some six hundred times less sweet than the leading high-intensity sweetener—follow? Even the best intentions leave us fraught with questions.

Sweets, I've come to conclude, are the ultimate feel-good, feel-bad food, and as such they're as beguiling as they're exasperating. They inspire stories as rich and deep as an intoxicating love affair. A better understanding of this relationship provides some insight into the meanings we instill in our food and the reasons why we consume it the way we do; it uncovers our pasts, our unspoken beliefs, fears, and desires. It sheds light on the way we view others.

You must think I exaggerate. I once would have thought the same; tasting sweet seems an intimate, isolated act. But as my pet project progressed, I quickly understood that sweetness hardly exists in a vacuum. It influences and is influenced by more things than

I could have ever expected. It's modified by smell; it's shaped by sight, sound, and touch. It's transformed by time, place, science, culture, and money. By looking at the world through the lens of sweet, I learned about the vulnerabilities and desires that color human nature and came to discover how the quest for the perfect sweet reflects our endless search for happiness without compromise.