

## Addendum regarding: The 2022 Certified Specialist of Spirits Study Guide, as published by the Society of Wine Educators

**Note:** This document outlines the substantive changes to the 2022 Study Guide as compared to the 2021 version of the CSS Study Guide. All page numbers reference the 2021 version. Please note that in addition to the information noted below, all of the tables concerning top-selling brands of particular classes of spirits have been updated to reflect the most current statistics available.

**Page 11:** the first paragraph under the heading “Heads, Tails, and Hearts” was revised so that it reads as follows: The first part of the distillate to come off the still is known as the *heads*, or *foreshots*. The heads contain a good deal of volatile compounds known as *low boilers* due to their lower boiling points. Low boilers—which may include acetone, methanol, acetaldehyde, lighter esters, and other compounds—are often non-potable or even poisonous. Similarly, the last part of the distillate run—known as the *tails* or *feints*—includes fusel oils, acetic acid, and other compounds referred to as high boilers (due to their higher boiling points). High boilers may also be unpleasant, non-potable, or toxic. The heads and tails of the distillation run may be discarded; alternatively, they may be added to the next distillation run in order to extract some of the remaining alcohol.

**Page 13:** the first paragraph under the heading “The Column Still” was revised to read as follows: Not surprisingly, after centuries of pot still use, people began to search for a more efficient method of distillation. Beginning in the early 1800s, several versions of a column still—also known as a continuous still and made up of a distillation column or columns—were invented and patented. The earliest known examples include those created by French distiller Jean-Baptiste Cellier-Blumenthal (patented in 1813) and Robert Stein—a member of a famous Scotch whisky-distilling family—patented in 1826. A well-known version—most likely a modification of Stein’s—was later patented by Aeneas Coffey, a retired Irish excise officer.

**Page 16:** the section on the structural components of oak was revised to read as follows: Oak heartwood contains the following three structural components:

- **Cellulose:** Cellulose is an organic compound whose strength and chemical resistance provide structural integrity to the oak, permitting it to keep its shape and durability for years. Cellulose is sometimes described as the “skeleton” of the wood. Cellulose makes up approximately 40% (or more) of the mass of the wood.



- *Hemicellulose*: Another organic compound, hemicellulose—sometimes described as the “matrix” of the wood—is found in almost all plant cell walls, along with cellulose. Hemicellulose is composed of many different sugars with lower molecular weights than those found in cellulose, which accounts for its easy solubility in alcohol. Hemicellulose makes up approximately 20% to 30% of the mass of the wood and is responsible for the *red layer* that forms in charred oak barrels.
- *Lignin*: Found in all types of wood, lignin is the “glue-like” substance that helps cement the cellulose fiber cells in the wood and provides rigidity. Lignin is also the source of a group of organic compounds called *methoxyphenols*. The methoxyphenols group includes vanillin and syringol. Vanillin smells like its namesake—vanilla—while syringol smells and tastes of smoke. Lignin comprises 25% to 30% of the mass of most types of wood.

The remaining 5% to 10% of the oak’s mass includes a range of organic compounds referred to as *extractives*. Extractives include various types of gums, fats, resins, waxes, oils, starches, coconut-scented lactones, volatile phenolic acids, and tannins. Tannins are specific polyphenolic compounds that help protect the plant from predation via their bitter taste components and astringency. (Note: Tannins in moderation can lend pleasant tastes, textures, and complexity to a well-aged spirit; however, an overly tannic spirit may be perceived as overtly bitter or overly astringent—often experienced as a *puckery* or textural drying sensation on the palate.)

Extractives are not considered structural components of the wood but are produced by (and found inside) the cells of the wood itself. Although small in quantity, these compounds can collectively provide over four hundred aromatic and flavor combinations to a maturing spirit. Consequently, with time in wood, the spirit will transform in color, aroma, taste, and character.

**Page 18:** the section under the heading “Blending” was revised to read as follows: In some cases, the finished spirit will be taken from a single barrel or cask. Such spirits may be labeled with the term *single barrel* or *single cask* and are typically considered quite rare and special. Depending on the size of the barrel, a single cask release may involve as few as 100 to 300 individually numbered bottles.

In most cases, the finished spirit will be crafted using many different barrels (of a single type of spirit produced at the same distillery) blended together. This is sometimes referred to as *batching* or *vatting*. This process helps to maintain the consistent *house style* of a particular spirit or brand and allows for enhanced complexity and balance in the final product.

The batching process is referenced in the often used but unregulated label term *small batch*. In some cases, small batch spirits are created from a group of ten to sixty specifically selected barrels; however, the term has no legally defined guidelines and is variously used by different brands and distilleries.

Other products are defined as a specific type of *blended spirit*. These products—including *blended Scotch whisky*, *blended bourbon*, and *navy-style rum*—are created via the mixing of different component spirits. A blended spirit may be comprised of products from different casks, ages, spirit types, production techniques, or even distilleries. The specific standards for some of these products will be discussed in the chapters that follow.

**Page 21:** the section under the heading “Glassware” was updated to read as follows: A wide range of specialty glasses designed for use in the sensory evaluation of spirits are available. These glasses—quite variable by shape and size—can be loosely grouped into the following categories: those shaped like a sherry-tasting *copita*, those shaped like a typical white wine tasting glass, tulip-or chimney-shaped glasses with a short stem, wide-bowled tumblers, and the sensory-engineered glass with a wide bowl and flared rim.

While a typical liqueur, port, or white wine tasting glass will serve the purpose of a casual tasting or a class for consumers, dedicated tasters may want to invest in a collection of specialty spirit tasting glasses such as the NEAT (Naturally Engineered Aroma Technology) glass, the Glencairn Whisky Glass (billed as the “official glass for whisky” and produced by Glencairn Crystal) or the Scotch Malt Whisky Society’s Spirits Glass. Specialty glasses are also available for gin, brandy, bourbon, tequila, and other spirits—including those made by Riedel, Schott Zwiesel, Spiegelau, and others—are available as well.

In any event, an ideal glass for a general spirit tasting should be made of standard thin, transparent glass. A broad bowl to facilitate ease of swirling is preferred. A capacity of 6–8 ounces (177–237 ml) should be enough to hold a 1- to 1¼-ounce (30–37 ml) serving of spirits throughout the tasting process without spilling. As for any type of professional tasting, the glasses should be clean, dry, and odor-free.

**Page 33:** the first paragraph under the heading “Base Materials” was updated to read as follows: As previously mentioned, throughout its history, vodka has been distilled using the most plentiful and least expensive materials available. Most often, these included potatoes, various grains, and grain-based products. There are very few restrictions as to what may be used to produce vodka, and those restrictions that do exist are typically specific to a particular place-of-origin or type of spirit. These days, vodka is produced using a dizzying array of base ingredients, including grapes, apples, honey, sugarcane, sugar beets, milk products, maple sap, sweet potatoes, rice, spelt, and quinoa (to name but a few). However, the majority of the vodkas on the market are made from grain—primarily corn, wheat, barley, and/or rye. As with all grain-based spirits, the grain must first undergo a conversion process to release the fermentable sugars stored within the grain.

**Page 33:** the first paragraph under the heading “filtration” was revised to read as follows: Vodka is often processed after distillation to further neutralize its character. However, contrary to widespread belief, most vodka is not *required* to be filtered or further processed after distillation; rather, this is typically an optional procedure. Many different procedures and materials—including micron paper, quartz crystals, membrane filters, precious metals, and porous rocks—are used in the filtration of vodka. However, activated carbon (charcoal) is the most widely used.

**Page 52:** the section under the heading “Raki” was revised to read as follows: *Raki* is an anise-flavored spirit and the national drink of Turkey. Throughout Southeastern Europe, raki is consumed as an aperitif and—typically diluted with water—with meals. When mixed with ice or water, raki turns milky white and due to this color, its sturdy levels of alcohol—many versions are 45% to 50% abv—and a plethora of local legends, raki is often referred to as *lion’s milk* (*aslan sütü*) in Turkey.

Raki was originally produced from the pomace left over from winemaking. However, when pomace was in short supply, spirits were imported and processed with aniseed. During the First World War, when trade was restricted, raisins, dried figs, and mulberries were used in the production of raki. Today, high-quality raki is produced from grapes—primarily of the *Sultana* and *Razaki* varieties, both of which are primarily table grapes and likely native to Turkey—in fresh and/or dried form. The grape must is fermented into wine and distilled in a column still to create a spirit base known as *suma*. The suma, which may be mixed with a neutral spirit, is then redistilled with aniseed using an alembic still and allowed to rest for a minimum of thirty days. Many producers of raki are located near the large city of Izmir (located along Turkey’s Aegean Coast), where the raw ingredients—including grapes, raisins, and anise—are fresh and abundant.

**Page 52:** the following was added as a new entry: ARAK—Arak, sometimes spelled *araq*, is an anise-flavored spirit produced in some parts of the Eastern Mediterranean and Middle East—including Syria, Lebanon, Israel, Palestine, and Jordan. Like raki, arak is produced primarily from a grape-based distillate and flavored with anise. Arak is traditionally served—along with *mezze* (appetizers) or other food—by mixing one part arak to two parts water and poured over small, ice-filled cups. As the ice may cause the oils in the anethole to solidify on the surface of the drink, a new cup is typically used for each serving. For this reason, if a bottle of arak is ordered in a restaurant, each drinker will be provided with several cups.

Note: *Arak* should not be confused with *arrack*, despite the similarities in spelling. The term *arrack* typically refers to a range of alcoholic beverages produced throughout India, Sri Lanka, and other parts of Southeast Asia. Sri Lankan Arrack (Ceylon Arrack) is produced from the sap of the unopened flowers of the Sri Lankan coconut palm tree. In other parts of the world, arrack may be distilled from sugarcane and/or sugar, coconut, fruit, nuts, palm sap, and/or grains. It is believed that arrack was first brought to Europe

via the Dutch East Indies Company and by 1862, it had shown up in a recipe for Arrack Punch (Ruby Punch) attributed to Jerry Thomas.

**Page 65:** the following update was added to the section on “Blended Malt Scotch Whisky: In 2019, the definition of blended malt Scotch whisky was expanded (as per the UK Scotch Whisky Regulations) to include whiskies produced by mixing two or more immature single malt distillates of Scottish origin prior to the prescribed wood aging. When using this procedure to create a blended malt Scotch whisky, the unaged distillates may be sourced from a single distillery or from more than one distillery.

**Page 74:** the following was added as a new entry: ENGLISH WHISKY—England, like so many of its neighbors, has a whisky-producing tradition. As detailed in the book *The Whisky Distilleries of the United Kingdom*—written by Alfred Barnard and published in 1887—whisky production in England can be traced back several centuries.

From as far back as the 1600s through the early 1900s, several whisky distilleries—including Bristol Distillery, Vauxhall Distillery of Liverpool, and Bank Hall Distillery (also of Liverpool)—were in operation, producing grain whiskies, malt whiskies, and blends. However, this era of English whisky production was largely interrupted in 1903 when the sole remaining producer of single malt whisky in the country—Lea Valley Distillery of Stratford, London—was shuttered.

From that time, whisky production in England was seldom heard of, despite the area’s success in the production of gin, liqueurs, cider, and brandy. This began to change in the early 2000s, as several whisky distilleries began to appear on the scene. One of the first such projects was launched in 2003, when the St Austell Brewery and Healey’s Cyder Farm—both located in Cornwall—joined forces to make an English single malt whisky using locally grown barley. The end product—Hicks & Healey Cornish Single Malt Whiskey (note the spelling), touted as *the first malt whiskey produced in England for almost a century*—was released in 2011 after seven years of wood aging.

Several other distilleries were established during this period, while at the same time other established distilleries began to produce whisky in addition to their previous offerings. These include the London Distillery Company, the Lakes Distillery (in the Lakes District, near Cumbria), the Cotswolds Distillery (of Warwickshire), Bimber Distillery (London), and Cooper King Distillery (based in North Yorkshire)—among others. At last count, there are close to thirty whisky distilleries at some stage of operation in England.

With little in the way of a modern whisky establishment, there is—for now—not much to speak of in terms of a typical flavor profile or characteristic style of English whisky. As such, it will be interesting to see how the whisky industry of England evolves!

**Page 78:** The following was added as a new entry: Kentucky Bourbon: As a major player in the production of bourbon and other spirits, the state of Kentucky takes its whiskey seriously. In accordance, state laws require that any product bearing the name

*Kentucky Bourbon* must be produced from grains that are cooked, fermented, and distilled in the state of Kentucky. In addition, the spirit must be aged (in new, charred oak barrels) for at least one year in the state of Kentucky. Other styles of whiskey may be labeled as a product of Kentucky if (in addition to any applicable federal guidelines) they are aged in Kentucky in oak barrels for a minimum of one year and they are produced using grains that are cooked, fermented, and distilled in the state of Kentucky. The exception to the rule is *Kentucky Corn Whiskey*, which does not need to be aged.

**Page 79:** the section on America American Rye Whiskey was updated to read as follows: AMERICAN RYE WHISKEY—In the late 1700s, rye was the prevalent whiskey of the northeastern United States, particularly around Pennsylvania, Maryland, New York, and Virginia. Settlers—many of German, Dutch, and Scotch-Irish heritage—found that rye could tolerate a variety of soil types as well as the cold winter weather of the mid-Atlantic, thus providing a reliable, high-yield crop.

One brand of rye whiskey—Old Overholt—survived Prohibition and is one of America’s oldest continually-maintained brands of whiskey. The brand was founded by the Oberholtzer family in West Overton, Pennsylvania in 1810. Over the years, the family name anglicized to *Overholt*, and in 1888 their flagship rye whiskey was named “Old Overholt” in honor of its founder—Abraham Overholt—who had passed away a few years earlier, and whose picture still graces the label.

Following Prohibition, the distilling industries of Pennsylvania, Maryland, and Virginia were largely replaced by other industries—such as steel and glass—while at the same time the shuttered stills of Kentucky roared back to life. As a result, the popularity of rye whiskey foundered after Prohibition, and at one point in time there were only a few nationally distributed rye whiskeys on the market—Old Overholt and Maryland’s Mount Vernon Rye among them.

Today, American rye whiskey is made from a mash of at least 51% rye. The remainder of the mash bill is generally corn and malted barley. Like Bourbon, American rye whiskey must be distilled at less than 160 proof and stored (at no more than 125 proof) in charred new oak containers. If aged for at least two years, it may be designated as straight rye whiskey.

These days, rye is enjoying a revival. Pennsylvania, Maryland, New York, and Virginia are once again leaders in terms of rye whiskey production alongside Kentucky, Tennessee, and California. In addition to Old Overholt, popular brands of American rye whiskey include Rittenhouse, Pikesville, Sazerac, Bulleit, Jim Beam, Templeton, Wild Turkey, and Kings County Empire Rye.

As home to the over thirty distilleries as well as the Lawrenceburg campus of MGP Distilling, the state of Indiana produces a great deal of rye whiskey. MGP Distilling is the largest producer of rye whiskey in the United States. In addition to producing its own brands—Redemption Rye and Rossville Union Straight Rye Whiskey, produced under

the *Ross & Squibb Distillery* brand—MGP supplies the base spirit for many types, styles, and brands of rye whiskey across the continent.

**Page 83:** the following update was added to the section on Japanese Whisky: In April of 2021, the Japan Spirits & Liqueurs Makers Association defined a set of standards for products labeled with the term “Japanese Whisky” or “Japanese Whiskey”. These include the following:

- Base ingredients are limited to malted grains, other cereal grains, and water extracted in Japan. Malted grains must always be used.
- Saccharification, fermentation, and distillation must be conducted at a distillery in Japan.
- The spirit must be aged in Japan in wooden casks (maximum capacity of 700 liters) for a minimum of 3 years.
- Must be bottled at a minimum of 40% abv.
- Products that do not comply or that contain spirits not produced in Japan may be labeled as “world blends” or “world whisky.”

These rules are not the result of legislation and are therefore not legally enforced by government entities. However, most of whisky producers in Japan are indeed members of the Japan Spirits & Liqueurs Makers Association and will therefore be in observance. Producers have until 2024 to bring all their products into compliance.

**Page 83:** the following was added as a new section: TAIWANESE WHISKY—Taiwan—home to a significant whisky market—is one of the largest consumers of Scotch whisky in the world (along with the United States, France, and Singapore), and is one of the few regions where single malts outsell blends. In recent years, the country has developed a whisky industry of its own, and in a relatively short period of time has positioned itself as a favorite category and destination for whisky lovers.

The first Taiwanese whiskies—bottled under the Kavalan brand—were released in 2008. The Kavalan Distillery—located in Yuanshan Township/Yilan County near the northeast coast of Taiwan—was opened in 2005 by the King Car Group, already famous for commodity products such as coffee and bottled water. Kavalan single malt is now sold in close to twenty different variants and has been recognized as one of the top whiskies in the world by such entities as the World Whisky Awards and the International Wines & Spirits Competition.

Another leading producer of Taiwanese whisky—the state-owned Taiwan Tobacco & Liquor Corporation—began releasing whisky under the Omar brand in 2010. Omar whisky—named after a Gaelic term for *amber*—is produced by the Nantou Distillery in Nantou County (a landlocked region located in the center of the island).

As a young producer, Taiwan does not have a certain type or style of whisky dictated by law or tradition, and producers enjoy the freedom to be innovative. The island—located between the 21<sup>st</sup> and 25<sup>th</sup> parallels—features a tropical/sub-tropical climate with long, hot summers and year-round high humidity. In this environment, whisky resting in

barrels evolves quickly and the angel's share may be as high as 12% annually (or even higher). As such, many Taiwanese whiskies are released to the market—and considered fully-matured—after just five or six years of barrel aging.

**Page 84:** the section on “WHISKEYS FROM AROUND THE WORLD” was updated to read as follows: Aside from the main whiskey-producing countries, whisky is produced in many regions and at several large, successful distilleries located throughout the world. Some of these are discussed in the section below.

Australia: The modern era of whisky production in Australia is said to have begun in the 1990s when Bill Lark (now a member of the Whisky Hall of Fame) opened Lark Distillery in Tasmania. Today, there are more than fifty distilleries operating in Australia, making a range of products—including single malt, rye, wheat, and blends. While whisky is produced throughout the country, Tasmania—at more than twenty distilleries—hosts the largest concentration of any state by far. The state of New South Wales—another leader in Australian whisky production—is home to more than ten whisky distilleries as well as a number of urban distilleries based in Sydney (the state's capitol and largest city).

Australian whisky came to the world's attention when Sullivans Cove Single Cask Malt Whisky, produced in Tasmania, was named the best single malt whisky out of a field of over three hundred entrants at the prestigious World Whisky Awards in 2014. It was the first time that a Tasmanian distillery won the award, which is typically bestowed on Scotland or Japan.

New Zealand: New Zealand has a rich heritage of whisky production dating back to the 1800s. However, the industry suffered some serious setbacks through the 1990s, including the shuttering of the Willowbank Distillery (aka Dunedin Distillery) in 1997. Later—in 2009—Greg Ramsey of The New Zealand Whisky Collection was able to purchase and bottle 443 barrels of well-aged stock leftover from the shuttered distillery. This brought worldwide attention to New Zealand whisky, and interest has grown from there.

These days, creativity is a hallmark of many New Zealand distilleries. Brands to watch for include the Oamaruvian (grain whisky made in Dunedin and aged near the sea in Oamaru, North Otago) and Manuka Smoke (made by Auckland's Thomson Whisky Distillery using 100% New Zealand-grown malted barley smoked over a fire of native Manuka wood).

New Zealand also has a long and rich tradition of moonshine. One of the most famous of these is Hokonui Moonshine—named after the Hokonui Hills located in the Southern Plains of New Zealand's South Island. It can be traced back to the 1870s and a widow from Scotland named Mary McRae. McRae, along with her seven children, supplied a good part of southern New Zealand with Hokonui Moonshine—illegal whiskey produced in the Hokonui Hills—beginning in 1872. After Mary's death (at the age of 92) in 1911, her children continued the moonshine tradition until the mid-1930s, when their stills



were destroyed by the local authorities. Their story is preserved at the Hokonui Moonshine Museum (located in the town of Gore) and celebrated each year at the Hokonui Moonshiners Festival. The current production of Hokonui Moonshine—made to the original recipe and branded as *Old Hokonui Whiskey*—is overseen by the Hokonui Trust.

France: Despite the fact that it is decidedly better known for wine and brandy, France is one of the world's leading consumers of Scotch whisky and has a local whisky industry all its own. Whisky producing regions—centered around the northern part of the country—include Brittany and Alsace; both areas have geographical indication (GI) status in the EU for their distinctive whisky.

Brittany—located along the English Channel and with a good deal of Celtic influence—produces a range of whiskies, including peated versions. Leading producers include the Warenghem Distillery (producers of the Armorik brand of Breton whisky) and Glen Ar Mor Distillery (meaning “by the seaside” in the local dialect). Whisky labeled under the Whisky Bretagne/Whisky Breton GI must be produced from (at least a portion of) malted cereal grain; unmalted grains—to include barley, wheat, buckwheat, triticale, rye, spelt, corn, and/or oats—may be included as well. The whisky must be aged for a minimum of three years in oak in an atmosphere that reflects the maritime climate of the region.

Alsace—located to the east of the Vosges Mountains and across the Rhine River from Germany—is home to products labeled under the Whisky d'Alsace/Whisky Alsacien GI. Whisky d'Alsace must be produced from 100% malted barley and distilled via batch distillation in copper-containing pot stills (hybrid stills no more than three plates are also allowed). Distillation is followed by a minimum of three years of oak aging in “Alsatian climatic conditions.” Founded in 1850, Distillerie Artisanale Lehman—producers of Elsass Whisky and recognized with the title *Entreprise du Patrimoine Vivant* (EVP/Living Heritage Enterprise)—is considered to be the oldest artisan distillery in Alsace. Other brands to know include Meyer's Whisky Alsacien (established in the village of Hohwarth in 1958), Distillerie G. Miclo (producers of Welche's Whisky), and Distillerie Hebb.

Spain: In Spain, *Destilerías y Crianza del Whisky S.A.* (otherwise known as Whisky DYC) was originally established in 1958 in Segovia (Castile y León). Whisky DYC boasts a production capacity of more than twenty million liters per year, and currently makes just over two million cases of whisky per year—enough to supply all of Spain with a range of malt, grain, and blended whiskies. Whisky DYC produces several distinct styles of Spanish whisky—including DYC 5 (aged for five years in American oak), DYC 8 (aged for eight years in American oak), and DYC Single Malt—as well as whiskey blends with no age statement (NAS) that are meant to be enjoyed in mixed drinks along with *Coca-Cola* or *Fanta* (carbonated fruit drinks).

The Czech Republic: The Czech Republic, building on its base of fine malted brews, has a few distilleries producing malt whiskeys. One in particular—Pradlo Distillery, a producer of single malts—became nationalized in the 1980s. In 1989, with the fall of

communism, the distillery was largely forgotten, and a large stash of whiskey was considered lost. This whisky was later uncovered and branded as *Hammer Head*, after the hammer mill used to grind the grain.

Mexico: Mexico is considered the birthplace of domesticated corn (*maize*), where it has long been revered as a dietary staple. It is perhaps because of this regard for corn that when distillation arrived in Mexico, agave and sugarcane were preferred for use in distillation, while corn was reserved for use in food or fermented beverages

This could be why Mexican whisky has—at least in modern times—been largely nonexistent as a category. However, beginning in the mid-2010s, this began to change, and a range of whisky products—focusing on Mexico's heirloom corn varieties—are now available. Brands to look for include a corn whisky made in Oaxaca by Piedre Almas (also a well-respected mezcal producer), Sierra Norte Whiskies (made from specific varieties of ancestral Oaxacan corn combined with 15% malted barley), and Abasolo (*El Whisky de Mexico*) produced from 100% *Cacahuazintle*—an heirloom variety of white dent corn.

Mexico also produces a range of unique grain-based spirits. Pox (pronounced like *posh*)—among the most ancient—is made using a blend of corn, wheat, and/or sugar cane. Pox—the name translates as *medicine* or *healing*—was originally produced by Tzotzil Mayans in the Mexican state of Chiapas, who used the drink as a medicine and in religious ceremonies. Pox is currently undefined and loosely regulated by the Mexican government, which means that it is produced in a range of styles and in many different areas within Mexico. Despite this, Pox—often described as having a toasty, smoky flavor similar to whisky—is beginning to be available outside of Mexico. Siglo Cero is the first brand of Pox to be distributed in the United States (where it is classified as a proprietary, spirit specialty).

Among the more recent products is *Nixta Licor de Elote* (corn liqueur)—launched in 2021 and produced by *Destilería y Bodega Abasolo*. Nixta—most likely the modern world's first corn liqueur—is based on an unaged distillate of ancestral corn. This base spirit is macerated with a combination of fresh and roasted corn before being sweetened with piloncillo (unrefined brown sugar). The resulting liqueur is rich with flavors of buttery sweet corn, caramel, and vanilla. Note: Nixta is named in honor of the process of *nixtamalization*—utilized by the Mayan and Aztec peoples—which involves soaking the corn in an alkaline solution. This helps to remove the fibrous outer skin of the corn, making its inherent nutrients more readily available, enhancing its flavors, and providing for ease in grinding and further preparation of the corn.

**Page 119:** the following update was added to the section on Demerara Rum: In July of 2021, The European Union registered a geographical indication (GI) for Demerara Rum. In order to be labeled with the term (and trademark) of the Demerara Rum GI, the spirit must be fermented and distilled within the defined production region, located on the low coastal plain of Guyana just a few miles/kilometers outside of the capital city of Georgetown. Demerara Rum GI may be produced using either sugarcane juice or

molasses, but the majority is produced using molasses. While the GI does allow for a product labeled as *Demerara Rum* to be exported and aged outside of Guyana, certain expressions—including *Cask Aged Demerara Rum*, *Special Reserve Demerara Rum* and *Grand Special Reserve Demerara Rum*—must be aged and bottled within the defined production zone.

**Page 134:** the first paragraph under the heading “Cooking” was updated to read as follows: Upon harvest, the aguamiel sap located inside the cabeza is partially composed of *fructans* (fructose-based polysaccharides/complex carbohydrates)—specifically *inulin* and *agavin* (among others)—which must be converted into fermentable sugars. This conversion often involves a process known as *hydrolysis*—the chemical breakdown of a compound due to a reaction with water—and/or prolonged exposure to moderate heat. The use of heat also assists with softening the piña, which permits it to be more easily milled later in the process. During cooking, the fructans will be converted into a range of flavor-producing compounds—most notably the highly fermentable simple sugars fructose and glucose.

**Page 142:** the section under the heading “The Mezcal Production Zone” was updated to read as follows: In addition to Oaxaca, approved production areas include the Mexican states of Guerrero, Durango, San Luis Potosí, and Zacatecas. Portions of the states of Tamaulipas, Michoacán, Sinaloa, Puebla, and Guanajuato are included in the zone as well.

**Page 154:** the following was added as a new section: Chocolate Liqueurs: Historical evidence suggests that sweet, chocolate-infused alcoholic beverages were produced in France as early as the 1660s. By the 1800s, French pharmacies were offering *ratafia de chocolat* (sometimes referred to as *ratafia de cocoa*), and the popularity of chocolate liqueurs had spread to Italy, Spain, England, and beyond.

These days, chocolate liqueurs—flavored with real chocolate (derived from cocoa beans) or chocolate-flavored extracts—are popular and widely available. The various products on the market can informally be classified into three types: dark chocolate liqueurs, chocolate cream liqueurs, and crème de cocoa.

Well-known dark chocolate liqueurs include Mozart Chocolate Liqueur (produced in Austria and available in a range of flavors), Godiva Chocolate Liqueur (part of the large bean-to-bar *Godiva Chocolatier* company), and Vicenzi Bicerin de Giuandijotto (traditional to Piedmont, Italy and flavored with chocolate and hazelnut).

Many of these brands also feature cream (or cream-flavored) versions of their flagship chocolate liqueurs. One popular brand—Vermeer Dutch Chocolate Cream Liqueur, made with Dutch chocolate, cream, and vodka—is recognizable for its label image featuring Johannes Vermeer's famous painting, *The Girl with a Pearl Earring* (1655). Crème de cocoa—typically flavored with chocolate extract as well as vanilla—is available in white (clear) and dark versions—is perhaps best known for its use in sweet cocktails such as the Grasshopper, Brandy Alexander, and Golden Cadillac.

Chocolate liqueur is often enjoyed as an after-dinner drink—either straight, added to coffee or hot chocolate—or in cocktails such as the Chocolate Martini (and its many variations). Chocolate liqueur may also be used as an ice cream topping or in confectionery recipes such as those for dessert sauces, chocolate truffles, ganache, cakes, and other pastries.