Chapter 1: What Is Prosecco?

Prosecco is a natural Italian sparkling wine that is usually white, and can be found in brut, extra dry and dry versions. Extra dry is the most popular.

Prosecco has fine long-lasting bubbles with a unique taste, expressing hints of apple, peach, pear and flower blossoms. It has a carefully controlled and low alcohol content of about 11.5% that does not interfere with the true flavor of the Prosecco grape. Prosecco has only about 100 calories per 5 ounce glass and there is none of the residual taste of vintner’s yeast inherent in Champagne.

Prosecco is both the name of the wine and the common name of the grape varietal from which it is made. Most Prosecco is made 100 percent from the Prosecco (the technical name for the grape varietal is “Glera”), although the minimum mandated requirement is 85%. Prosecco has been described as Italian Champagne. However, Prosecco is not Champagne because it is made very differently. Unlike Champagne, Prosecco has a taste that is younger and fresher. The difference is all about the yeast. We will explain that later.

All real Prosecco must carry either a DOC or DOCG designation on the label, and be grown and made only in designated areas. The best DOCG Prosecco comes from a small, exclusive area in the Veneto region of Italy covering less than 3,500 ettari, approximately 8,600 acres of vineyards. These 3,500 ettari have a predominantly southern sun exposure, soil composition, geology, elevation, and mountain water source unique to the Veneto. In contrast, the Champagne region of France covers more than 35,000 ettari or 10 times the area.

Chapter 2 will describe the Veneto region in more detail.
Chapter 2:  The Veneto Region

The Veneto Region of Italy comprises seven Provinces: Venezia, Treviso, Belluno, Vicenza, Verona, Padova and Rovigo.

The Conegliano-Valdobbiadene DOCG district is located in the northeast of the Province of Treviso, about an hour’s drive from Venezia. This is a district full of charm, art, architecture, and history replete with castles, aristocratic villas, Roman ruins and centuries-old oenological traditions. The residents have a deep-rooted sense of tradition reflected in their hospitality and in local foods such as cheeses, wild mushrooms, honey, chestnuts and, of course, Prosecco. It is a confluence of culture and nature.

The town of Conegliano to the east is home to Italy’s first school of viticulture and oenology that was founded in 1876. (Conegliano is also Lucia Sardi’s birthplace.)

To the west is Valdobbiadene (home of Gregorio Bortolin’s Ca’Salina winery) a village that contains some of the highest Prosecco vineyards, located on steep hillsides requiring that all cultivation and grape harvesting be conducted by hand. Prosecco has been present here for more than 200 years, and it even can be traced back to the time of the Roman Empire. Gregorio’s family has lived in Valdobbiadene for more than 500 years … that’s a long time!

Chapter 3 more fully explains the DOCG and DOC.
Chapter 3:  DOC and DOCG Designations

These designations are derived from Italian law that regulates the production of wine and Prosecco. The DOC is “Denominazione di Origine Controllata” or Certification of Controlled Origin. The DOCG adds e Garantita (Guaranteed Origin) and is reserved for wines of exceptional heritage. This guarantee is provided by three Italian governmental regulatory bodies: The Consorzio di Tutela (Consortium for Protection) which oversees production; the Valoritalia which certifies the wine; and the Italian State that authorizes a numbered label for each DOCG Prosecco bottle. DOC/DOCG designations stipulate precisely where the grapes can be grown, which grapes can be used, and the required time for aging before the wine can be released.

This salmon-colored DOCG neck band serves as a seal and is visible evidence of the guarantee of fine quality. The seal carries a unique identification number that makes each bottle traceable.

According to the Minister of Italian Agriculture and Forestry, Luca Zaia, authentic Italian Prosecco will now be “safeguarded both within the European community and internationally.” Commencing August 2009 Prosecco no longer refers only to a grape varietal, but also to the DOC/DOCG. This means that starting with the 2010 harvest, Italian law prohibits the sale of generic or faux Prosecco most of which has been of poor quality and has tainted the reputation of the original. Effective April of 2010 only the DOC and the more stringent Conegliano-Valdobbiadene, DOCG, will be allowed. The new law serves to end the plague of imitations from within and outside of Italy.

There is only one DOCG Prosecco district in all of Italy, and it is designated as the historic zone of Conegliano-Valdobbiadene. This accolade is awarded only to the most exceptional and rigidly controlled Prosecco in Italy; only Prosecco from this unique area can claim that distinction.
Chapter 4: The Prosecco DOCG District

The Prosecco DOCG district is very limited and contains just 8,600 acres. It is confined by Italian law to the area between Conegliano and Valdobbiadene, including only the following 14 towns in the Province of Treviso:

- Cison di Valmarino
- Colle Umberto
- Conegliano
- Farra di Soligo
- Follina Tarzo
- Miane
- Pieve di Soligo
- Refrontolo
- San Pietro di Feletto
- San Vendemiano
- Susegana
- Valdobbiadene
- Vidor
- Vittorio Veneto

As a result of the new Italian law (effective August of 2010) it is now illegal for producers outside of the DOCG/DOC to use the name Prosecco.

Similar to Champagne, DOCG Prosecco is bottled with three separate designations (dry, extra dry and brut) based upon the amount of residual sugar remaining after the carbon dioxide producing second fermentation. It is this second fermentation that makes a sparkling wine.

The actual production methods of French Champagne and Italian Prosecco, however, could not be more different. The two methods differ not only by the allowed grape varieties and the vinification process itself, but by the culture, economics, style, creativity and innovation of two very distinct enological heritages.

More on the differences between Prosecco and Champagne in later Chapters.
Chapter 5: Exploding Bottles

There are two markedly different physical, philosophical and cultural methods used for producing sparkling wine. *Il metodo italiano* (the Italian method) was invented and patented by Federico Martinotti from Piemonte in 1896 and is used to make Prosecco. The French method, referred to as *methode champenoise*, is used to make Champagne. It all has to do with the yeast.

**A Little History About Champagne**

During the time of the French Benedictine monk Dom Pierre Perignon (1638 – 1715: who did not actually invent Champagne) a second and spontaneous “in-bottle” fermentation that created carbon dioxide (bubbles) was an enormous problem for early wine makers. Cold autumn weather frequently halted the initial yeast-driven fermentation process prematurely and prevented fermentable sugars from being fully converted into alcohol.

If the wine were bottled at this stage (and it frequently was), it would become a bomb waiting to explode. The onset of warm spring temperatures would reactivate the dormant yeast and reinitiate the fermentation process, thereby generating carbon dioxide within the bottle. The resulting pressure within the glass bottles, not designed or manufactured to withstand it, frequently would explode sending glass shrapnel everywhere and causing nearby bottles to explode in a chain reaction. Clearly this was a hazard to any hapless soul working in the wine cellar.

Seventeenth century wine makers of the Champenois region of France did all they could to prevent a second, “in-bottle” fermentation of their wines. Exploding bottles destroyed a valuable and hard-earned commodity; sparkling wine was considered a major flaw.

During the 18th century, sparkling wine grew in popularity. French wine makers deliberately began trying to make their wines sparkle, but they lacked the knowledge of controlling the second “in bottle” fermentation, removing yeast sediments and manufacturing bottles of sufficient strength. It is this second “in bottle” fermentation that defines the traditional method or *methode champenoise*. Champagne is made by the individual bottle, one bottle at a time … Prosecco using *il metodo italiano* (the Italian method) is made very differently.

It was not until the 19th century that these obstacles were overcome. Prior to this, it was not uncommon for “sparkling” Champagne wine cellars to lose 20 to 90 percent of their bottles to violent explosive breakage, apparently creating a new and unintended use for medieval armor to protect cellar workers!

The relationship between the added sugar and yeast, and the resulting carbon dioxide production and pressure, became better known over time. It was not until about 1830 that formulas were developed for the correct amount of sugar and yeast needed for each individual “in-bottle” fermentation. Still, a major problem of Champagne production remained … the yeast.

Chapter 6: The Italian Method

The Italian method for making Prosecco is very different than Champagne. It begins with the very strictly controlled Prosecco grape that is grown in highly regulated Veneto DOC/DOCG districts. The first objective is to make the very best Prosecco still wine possible. Then, and only then does the precisely controlled second fermentation process begin. That is the essence of the Italian method.

The Prosecco process, il metodo italiano, for the second fermentation was created in 1896 by Federico Martinotti - it is not done by the individual bottle. The Prosecco still wine first is transferred to a large stainless steel autoclave where the second fermentation takes place in a controlled environment of temperature and pressure. The sugar and yeast needed to initiate the second fermentation, and to produce carbon dioxide, are added into the autoclave and the wine is processed in large volume to ensure the best quality control and consistency of taste. Exposure to the yeast is monitored carefully and the second fermentation is usually completed in less than a month.

Next, the sparkling Prosecco wine is filtered under constant pressure to remove the dead yeast and other sediments. A second stainless steel autoclave is used, again under constant pressure, to reduce the temperature of the Prosecco to a point low enough for tartaric acid, a natural substance in the grapes, to precipitate out of the wine. This precipitate is removed by a second filtration process, and the finished sparkling Prosecco is bottled under the same original pressure. This all adds up to consistency and excellence.

The maintenance of constant pressure throughout each phase of the second fermentation gives Prosecco its fine, long lasting bubbles, while filtration removes the unwanted effects of the yeast. This metodo italiano imbues Prosecco with its fresh, clean, fruity taste transporting the flavor of the Prosecco grape, and its immediate and natural growing environment, to the palate. This is why Prosecco captures the cultural soul of the Veneto.

Chapter 7 describes the French method.
Chapter 7: The French Method

In the 19th century, Champagne, made one bottle at a time, was generally cloudy. This was caused by dead, second-fermentation yeast being trapped in the bottle. Dead yeast made the sparkling wine subject to undesirable flavors and aromas, and the individual in-bottle second fermentation was prone to wide variances in quality. A method had to be developed for opening each bottle and removing the spent yeast, without losing too much carbon dioxide or wine. The Champagne producers developed a labor-intensive process called riddling to help deal with the problem … it is still in use today.

In 1919 the French government established the Appellation d’Origine Controlee (AOC) which defined vinification standards and boundaries for approved growing areas. This was the precursor of the Italian DOC and DOCG regulations. There are, however, major differences.

Italian DOCG Prosecco is grown and made at each respective cantina, thereby ensuring a bond with the land, the individual grapes, the skill of the cantina’s vintner and the bottling. This unbroken chain provides the ability to uniquely number and track each individual bottle of DOCG Prosecco. Such is not the case with Champagne.

There are over 19,000 vineyards in the 86,000 acre Champagne region (Champagne is the name of the region, not the grape varietal) that grow a range of grape varietals authorized for use in making Champagne, including chardonnay, pinot noir, and pinot meunier. Unlike Prosecco, which is handpicked at the moment of optimum ripeness, the grapes used for making Champagne are generally picked earlier in the season when sugar levels are lower and acid levels higher. These grapes are then sold to more than 300 different producers. The direct link between the land, the grapes, and the wine produced is lost because there is no single source of ownership from start to completion.

Beginning with grapes of widely varying quality, Champagne is produced in the bottle and by the individual bottle (about 200 million bottles each year). Each bottle is essentially a 750 ml “mini-processing” device that is subject to the vagaries of the natural reactions among the wine, sugar, and yeast. Flavor and quality control variability is inevitable. (Imagine trying to mix cookie dough one cookie at a time.)

The French Riddling Solution

Riddling begins with the yeast. The challenge faced by all Champagne makers to this day is how to get the residual dead yeast and cloudiness out of each individually sealed and pressurized bottle. The answer turned out to be a combination of gravity and time.

A base wine is produced in the usual fashion with natural sugars in the grapes being converted into alcohol and carbon dioxide that is allowed to escape. This base wine is generally blended with wines from a variety of other vineyards, as well as wine from other years, to produce what is known as a non-vintage cuvee. The cuvee is bottled and to each individual bottle is added several grams of sugar and yeast. The bottles are stored horizontally in a wine cellar for about 18 months during which time the
second fermentation takes place and carbon dioxide is produced creating sparkling wine. The wine is also exposed to the yeast for the same amount of time and the resulting flavor at this stage is not appealing.

After this second fermentation, the bottles are placed into special racks called pupitres that initially hold the bottles at a 45 degree angle, with the neck of the bottle pointed down. Every few days the bottles are given a shake and turned by hand with the angle of racking gradually increasing until the bottle is vertical. This intensive process of shaking and turning is referred to as riddling, and it continues for approximately six to eight weeks. The simple effects of gravity and time eventually cause most of the dead yeast and sediment to settle into the neck of each bottle. Now, after all that effort, the dead yeast and sediment still remain in the bottle and have to be removed.

Eventually, the cork is pulled from each bottle and the yeast sediment, referred to as “the lees,” is poured out, losing as little of the wine and carbonation as possible. Now, however, the bottle is no longer full. The Champenois response was to add some liquid back into the bottles. This liquid has been given the name of liqueur d’expedition, but is nothing more than a combination of base wine, sugar and sulfur dioxide (a preservative). The sugar is added to counteract the high acidity of the wine and to achieve the desired level of dryness: dry, extra dry, or brut. Since Champagne is not filtered, a little yeast and sediment remain in every bottle. Each bottle then is re-corked, a wire cage attached, and the bottle placed back into the cellar for additional aging.

Manual riddling still is used by some Champagne producers for reasons of tradition, but most riddling is performed by a mechanical system known as gyropallettes. The disgorgement of the lees (yeast sediment) is generally performed by freezing a certain amount of the yeast and sediment solution located in the neck of each bottle, and allowing the pressure of the carbon dioxide gas to force the frozen sediment plug out.
Chapter 8: The Prosecco Experience

Does Prosecco taste better than Champagne? It depends. There are many who do not like the yeasty flavor of Champagne. Many say that they prefer the lightness of Prosecco to the heavier feel of Champagne. There are those who try Prosecco for the first time and are amazed by its fresh taste and fine bubbles. We have found in our informal (and certainly not scientific) blind tastings that Prosecco was frequently preferred to traditional Champagne.

Champagne has been touted as the wine of choice for a special occasion and its expense has been marketed as a sign of exclusivity. Non-vintage Champagne of mediocre quality can cost more than $50 per bottle, and that price climbs rapidly upward. In contrast, some of the finest DOCG Prosecco is priced under $20 per bottle giving birth to the phrase that “the best Prosecco costs less than the cheapest Champagne” and it’s made in Italy.

The Champagne producers have succeeded in taking the costly and inconsistent methods of in-bottle fermentation, riddling, and “dosage” and converting them into the Champagne mystique. The highlight of a winery visit in France or California is a stop in the riddling room to view the technique in action. This makes for a nice tour, but is hardly needed to produce a fine quality sparkling wine. One can speculate that if the Champagne producers had discovered il metodo italiano they would be using it. However, methode champenoise is now far too entrenched to change.

Prosecco can be enjoyed at an elegant affair or wedding, at a party, on a lazy summer afternoon, or before dinner as an aperitif and, of course, at your local restaurant. There are many more occasions and situations where you might naturally drink Prosecco and not Champagne. Sitting by the pool, at a picnic or afternoon cookout, lunch with a friend, with a simple plate of fruit or cheese or in front of a winter fire. Prosecco can be enjoyed on any occasion or no occasion at all. Champagne is not the right companion for such experiences as it simply costs too much.