

MASTERING THE ART AND SCIENCE OF FOOD AND WINE PAIRING



y interest in food and wine has spanned more than three decades, and in the past several years, this interest has taken center stage. This text was developed as a response to the need to create an experiential methodology to demystify the food-and-wine pairing process. The main focus of this process is on taste characteristics of food and wine from both culinary and sensory perspectives.

The discussions and exercises in this text are designed to provide you with an increased depth of experience in food and wine pairing and knowledge of how food and wine elements interact and transform one another. The first section of this text focuses on the basics of wine evaluation, an understanding of the gastronomic identity, and its relationship with wine and food marriages.

Chapter 1 introduces the concepts and methodology used throughout this text. The food-and-wine pairing process combines techniques derived from the general sensory literature, the wine evaluation literature, and the culinary arts literature. The heart of the process relies on a systematic approach used to induce, quantify, analyze, and assess the responses to food and wine products based on what is perceived through the senses of sight, smell, taste, touch, and hearing.

Chapter 2 provides an overview of the sensory process as applied to wine evaluation. Wine evaluation encompasses a visual examination, olfactory examination, and taste examination. The exercises in this chapter will arm you with tools to clearly identify the primary taste characteristics in wine and food (sweet, sour, bitter, and salty) as well as to differentiate bitterness from astringency. The wine evaluation exercises will allow you to reinforce previous experiences in wine tasting and provide a clear differentiation of the most common wine varietals based on color, smell, body, and taste.

Chapters 3 and 4 focus on the concept of gastronomic identity. A region's gastronomic identity is determined by the environment and cultural elements that impact prevailing components, textures, and flavors in wine and food. The dominant elements in the environment determining wine characteristics include geography and climate. Culture elements include religion, history, level of ethnic diversity, innovations, capabilities, traditions, beliefs, and values. Historical events have had a substantial impact on the wine industry throughout the world. Old World and New World wine regions have differing histories, traditions, and geography. The boundaries between the Old and New Worlds are blurring with the sharing of new technologies and viticulture practices. Old World traditions are being adopted by New World producers as they take a closer look at the relationship between the land and the grape. Just like all cuisine, the wine industry is in constant evolution created by a fusion of unique and identifiable products and traditions that change over time. The food and wine industries are constantly evolving and provide a myriad of opportunities for professionals of all ages to take part.

The pairing of food and wine is an interesting topic and even more interesting when experiential tastings are involved. The upcoming exercises will provide you with a tool kit of ideas, concepts, and knowledge to enable you to quickly identify key wine and food elements so that you will be able to pair wine and food with confidence.

I hope that you enjoy reading the material in this book as well as doing the end-of-chapter exercises. The material and experiences presented in this text just scratch the surface of the possibilities and variety available in the market today. The background and experience you develop throughout the readings and exercises will bolster your confidence in wine, food, and combining the two. I hope this process piques your curiosity and that you will continue this exciting lifelong journey of learning and experimentation.

CHAPTER 1 THE WINE AND FOOD PYRAMID: A HIERARCHY OF TASTE

CHAPTER OUTLINE:

Introduction

Objectives of Food and Wine Pairing Aperitif: The Italian Wine and Food Perspective Food and Wine Pairing Mechanics: Matching Traditions Overview of Book Methods Key Elements of Wine and Food: A Hierarchical Perspective Summary: Where Do We Go from Here? Classic Italian Wine and Food Examples

KEY CONCEPTS:

- Motivations of wine and food pairing
- Food and wine sensory pyramid
- Primary components
- Texture elements
- Flavor intensity, persistency, and spiciness

INTRODUCTION

W hile we all have a lifetime's worth of experiences and knowledge relating to food tastes and characteristics, most people do not enjoy wine with meals on a daily basis. As a result, the general population lacks a fully developed ability to instinctively match appropriate wines with particular foods. Selections of appropriate wine and food pairings provide restaurant operators with opportunities to increase business profitability through their wine sales and to increase customer satisfaction with the overall dining experience.¹ However, it is quite challenging for foodservice industry professionals as well as the general dining public to come up with synergistic wine and food matches, and both restaurant operation and the culinary arts would be greatly enhanced by the demystification of food and wine pairing.

While I was researching and developing the methods presented in this text, it became apparent that the books currently on the market provide discussions of wine and food item selections but provide little depth of information concerning direct relationships and reactions between food and wine components, flavors, and textures.² In testing the methods presented in this text, it also became apparent that most people have difficulty understanding wine terminology, indicating a need for more user-friendly definitions for the terms most frequently used. In other words, while a need for a greater understanding of wine and food pairing exists, readily available methods and techniques are lacking. This text addresses these concerns by providing more accessible methods and processes to educate and train individuals in food and wine pairing and evaluation. To Pair or Not to Pair? Typical food-and-wine pairing advice focuses on suggestions such as "noisettes of venison with Cumberland sauce are best served with a 2000 Robert Mondavi Zinfandel." This type of advice is meaningless for the purposes of increasing our understanding of the foodand-wine pairing process. In fact, it limits our ability to develop an instinctive capability to match food and wine. On a day-to-day basis, most of us would rather know things such as "If I am preparing chicken for my next meal, does it matter whether it is baked, grilled, or fried when I'm deciding what wine to serve with it?" In reality, there are very few wine choices that will ruin a meal, but good choices can raise the experience of a meal from enjoyable to memorable. The method used in this text provides principles that can be useful when selecting wines for either a meal you are preparing, a meal you have while dining at your favorite restaurant, or a dinner party you attend as a guest.

If you are a restaurateur by profession, an increased understanding of basic pairing objectives will increase your confidence when you provide wine and food pairing selections to your customers. From a business perspective, your staff's ability to recommend the wine that will best complement the foods served can significantly increase the average check and thus bottom-line profits. It will also enhance customers' perception of professionalism of service and make their dining experience more satisfying, resulting in more return business and positive word-of-mouth advertising.

OBJECTIVES OF FOOD AND WINE PAIRING

I he primary objective of the food and wine pairing method used in this text is to develop skills in identifying the key elements in food and wine that will directly impact pairing them, whether the pairing is based on contrasts or similarities. An example of basic food contrast would be a peanut butter and jelly sandwich. The contrast of the savory saltiness of the peanut butter with the sweet, fruity jelly is great. An example of a food item with similarities is s'mores, in which all of the major components are sweet: graham cracker, marshmallow, and milk chocolate. However, there is a contrast in terms of texture—crispy graham cracker with gooey marshmallow and chocolate. Such contrasts and similarities serve as the basic considerations for wine and food pairing.

As you develop your knowledge of the key issues related to food and wine pairing (components, flavors, and textures; contrast or similarity; and a rudimentary understanding of flavor/component differences in wines of the world), your ability to predict exceptional food and wine pairings will greatly improve. You will determine the ultimate food and wine parings through practice, practice, and more practice. Each food and wine practice session, in and of itself, can be a delightful, life-changing experience.

Using music as an analogy, elements of food and wine can be thought of as "notes" that can be arranged in a variety of ways and at a variety of levels. Just as a musician merges

groups of notes into chords and arranges them into a pleasant melody, the chef or winemaker combines food or wine "notes" on a range of scales into chords of taste, texture, and flavor. The finished dish or wine becomes a pleasant melody in its own right. A food and wine "composer" then combines the appropriate dishes and wines into a potential multicourse "concerto" of taste that appeals to all of the senses and heightens the gastronomic experience beyond the possibilities of drinking the wine or eating the dish separately. Food and wine can serve as equal partners in this arrangement, or a particular food item or wine may take on a supporting role, as a particular situation dictates.



In the following Aperitif, Enrico Bazzoni, director of U.S. Programs for the Italian Culinary

Institute for Foreign Professionals, carries this musical analogy forward and shares the past and present Italian perspective on wine and food pairing, highlighting the desire to achieve balance and harmony in food and wine, as in business and the rest of life. At the end of this chapter, Enrico also provides some classic Italian recipes and pairing examples.

How to select the ideal wine for a particular food dish? That is the question!

Aperitif | The Italian Wine and Food Perspective

Une of the most famous pieces of music ever written is Antonio Vivaldi's *The Four Seasons*. It is used as a theme in movies, in TV commercials, and on the radio. More than four hundred years after its first performance, it is still one of the best-sellers in the music business. Every violinist in the world has played it over and over, interpreted it, modified its cadence, its structure, its tempo, trying to express the "real" way Vivaldi must have heard it in his head through variations. No matter how many changes occur through various interpretations, *The Four Seasons* manages to retain its mercurial qualities, with some of the most exuberant and yet haunting melodies of any piece of music ever written.

Vivaldi also called the piece *Il cimento dell'armonia e dell'invenzione*, which literally translates to "the contest of harmony and invention." This alternative title suggests that, after having written the piece, the composer realized that this was indeed the ultimate example of the eternal search and the constant struggle for balance between divine harmony and human invention in music.

This is a struggle with which we are faced every day of our lives. Because we usually spend our days on a less intellectual plane, we don't recognize the fact that we are always trying to build bridges between opposites, like earth and heaven. Sometimes we pray, maybe we meditate a little; we may even think about the afterlife and so on, but soon we have to come back to our routines, to our everyday lives.

Nevertheless, although we may not realize it, this struggle never leaves us. It's always there, even in the most minute and seemingly unimportant events of our daily lives. It may sound far-fetched to compare an exalted work of art with the minutiae of our lives, but it is clear that in our professions we seek to achieve a balance between the demands of our jobs and the demands of our lives. We seek balance within our families and within ourselves. We also seek balance between spirituality and material goods.

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In the culinary arts, we seek balance regarding the satisfaction of our physical senses. A person who consistently eats too much is called a glutton and is ridiculed and shunned by society, as are the drunkard, the miser, and all those other unsavory, immoderate types of people who fill the wells of Dante's Inferno. *In medium stat virtus* is what our Latin forebears used to say—virtue is found in the middle.

Perhaps this concept of seeking balance is best expressed in the words of Gianfranco Lercara, Italy's gold-medal-winning sommelier, who teaches wine studies at the Italian Culinary Institute for Foreign Professionals in Costigliole d'Asti, near Turin, Italy: "In the Italian eno-gastronomic experience," he says, "wine accompanies food, and food is always constantly searching for the best wine. One must understand the term 'to accompany' as the perfect marriage of both elements, where there may not be prevalence of one over the other, but where there is the best possible expression of both."³

It has not been very easy for the Italian culinary-enological culture to reach this position. Historically, wines from one region were traditionally paired with the foods of that region. In areas where red wine was more popular or plentiful, it was not uncommon to see it served with fish or seafood, without too much thought being given to the character of the wine or the food. Each was appreciated and savored on its own; there was no search for "synergy," as we strive for nowadays.

It's important to note that the concept of wine and food pairing is not a totally new idea in Italy. In fact, the importance of wine and food pairing has been a part of Italian life since Roman times. The famous food connoisseur Archestratus, founder of the first culinary school in the Western world, wrote that "a fat eel [the Romans were particularly fond of eels, which they farmed in pools] is particularly good when accompanied by a good Phalernum," referring to a wine still produced in the region of Naples. In many cases, traditional pairings work perfectly, as in the choice of a Lambrusco wine to accompany the traditional zampone (a local specialty consisting of a pig's foot stuffed with forcemeat, bacon, truffles, and seasoning) in Modena or Bologna, or the choice of Tocai del Collio (a native white grape variety from northeastern Italy) with prosciutto di San Daniele in the Friuli–Venezia Giulia region.⁴

In these cases, the interaction between these regional items creates a natural match. In other cases, however, each time a morsel of food is tasted, followed by a sip of wine, the palate has to adjust and adapt to the often sharp contrasts resulting from the interaction of the wine and food. Prior to the 1960s, food and wine pairing in Italy was a concept relegated to a very small number of connoisseurs, the affluent, and the nobility, who in most instances would choose a French wine rather than an Italian one to accompany their meals.

Although Italy has always produced some excellent wines, and a substantial number of good wines, the majority of the wine production has always been of the bulk commercial variety. For some vintages, production reached 1.8 billion gallons,⁵ and "good" Italian wines were considered the exception rather than the rule. Then, in 1963, the Italian government issued the DOC (*denominazione di origine controllata*) laws, regulating all the phases of wine production, including territory, vines, yields, alcohol content, sugar levels, names of wine, and labels used. In an attempt to control and maintain the product in as natural a state as possible (and to avoid adulteration), Italian DOC laws strictly prohibited addition of sugar to the must. In a spectacular leap forward, Italy's wine production jumped from a process focusing on quantity to one that focuses on quality.

Many changes have occurred since 1963, and some well-known vintners have even chosen to innovate outside of the restrictive DOC structure and produce local or regional "boutique wines" of high quality that fetch astronomical prices. This is possible precisely because of the introduction of the DOC laws, which established the basic patterns of quality production and stimulated research in the field: the use of several dozen autochthonous vines, the cultivation of imported varieties, and innovation in vinification processes (temperature control, barrels, and barriques of different sizes and woods). In a relatively short time, the Italian (and the world's) consumer no longer had to resort to French wines in order to drink a good wine with a meal—wines of consistently high quality, and eventually of prestige, were now produced at home in Italy. The centuries-old tradition of consumers drinking ordinary wine with meals shifted to making a conscious act of choice and culture. The quasi-mechanical process of drinking a specific wine with a certain meal because "that's the way it has always been done" has now become a more intellectual

process, with a search for interaction, compatibility of flavors, nuance, and balance. With this has come a new set of rules. These rules serve as general guidelines to help the wine and food amateur as much as the professional. They should be not restrictive but indicative; they should not interfere with the expansion of knowledge but help to stimulate its growth.

Following the older French and English schools of thought, Italian wine connoisseurs adopted the same general set of rules regarding the use of specific wines with certain foods, such as "white wines with fish and red wines with meat," "whites should be chilled and reds should be kept at room temperature," and some other generalizations, used to avoid making the grossest mistakes. Eventually (and inevitably), more sophisticated guidelines came into play. Sometimes these guidelines were heavily influenced by scientific information, such as from chemical analysis, or by other, more esoteric notions. Many of these ideas make it difficult for the beginner or even for the expert to understand, let alone to be on par with, the current ideology in wine and food pairing.



It is therefore most important to remember that while this intellectual process is common and universal today, the experience in itself is always an individual and personal one. Rules have been established for those (especially beginners) who may prefer to use somebody else's experience and advice in order to acquire a well-grounded knowledge of the subject in the shortest amount of time. These people will never eat a raw artichoke while drinking red wine because "it is a well-known fact" (predicated by somebody else) that a substance in the artichoke, cyanin, will clash with the tannins in the red wine, thus making your mouth a battlefield of contrasting sensations. (The best thing to drink with a raw or cooked arti-

choke is a nice fresh glass of water.) On the other end of the spectrum, for those who prefer to take the road less traveled, there is the empirical method, which calls for eating a raw artichoke while drinking red wine, in order to experience firsthand what the clashing of sensations in your mouth feels like. The empiricist takes the long way around, disregards the rules, makes "mistakes" on purpose, and does not listen to the guru of the day. The empiricist uses an abundance of wines with the proverbial cornucopia of foods. Most importantly, he or she makes use of this process in the company of good friends and family and enjoys every step of this exercise, which should never be intimidating and is always void of prejudice. Fortunately, there is an ample supply of quality wines and even more foods in the Italian repertoire to satisfy the most demanding research, which makes this process a most rewarding experience.

The basic evaluation process for the Italian wine and food empiricist is as follows: all foods and wines are evaluated, and each evaluation is collected and recorded on a simple form. Each wine is evaluated for:

- **1.** Visual observation: color, clarity, hue, density
- **2.** Olfactory qualities: nose (aroma, bouquet)
- 3. Taste qualities: sweetness, fruitiness, acidity, bitterness, tannins, thinness, heaviness, finish, etc.
- 4. Overall impressions: general qualities, balance

Although some people maintain that the visual observation is not important in the pairing of food and wine, I think that it is silly to disregard such an important factor, especially today, when so much weight is put on food presentation, colors of ingredients, and so on. The color of the wine should also be considered as an important factor in the process of pairing. We say, "We eat with our eyes first"; we should say, "We eat *and drink* with our eyes first."

The Italian Culinary Institute for Foreigners in Castello di Costigliole d'Asti, overlooking the village of Costigliole d'Asti, Italy (courtesy of the Italian Culinary Institute for Foreigners).

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For each category, there are many more points of evaluation, especially in the areas of olfactory and taste sensations. Many individuals sense different impressions based upon their experiences with their noses and palates. It is very interesting to catalogue these impressions and attempt to determine a general theory across a group of evaluators.

The same evaluation form is used for each food tasted, with each dish evaluated for:

- **1.** Eye appeal and color combination
- **2.** Aromatic character
- 3. Sweetness, saltiness, acidity, leanness, fatness, and texture
- **4.** Overall impressions

Lastly, both sets of evaluations are paired and given a final grade. This task can become overwhelming if you want to analyze many wines with many dishes. There could be thousands of combinations. A suggested method to simplify things is to cook a specific dish with a particular wine in mind to pair with it. This method can be very gratifying, especially for those who have acquired a strong level of cooking knowledge and are not constrained by the written recipe. In the equation of wine and food pairing (great match = wine elements + food elements), the wine tends to remain unchangeable while the food has more inherent flexibility. For instance, it is easier to change the character of a dish than the personality of a 2004 vintage Sangiovese. For this reason, many meals, ordinary or extravagant, are now designed around the wines offered, rather than vice versa.

After a certain amount of experimentation (and inevitable mistakes—none too unpleasant and all forgivable), certain patterns begin to emerge that may or may not follow the rules and guidelines of old. From there, it is possible to move on to a second tier of evaluations and perfect the process by adopting a scale for each category, let's say from 1 to 10. Each wine characteristic should then be evaluated based on degrees of color, clarity, hue, bouquet, and so on, rated on this 1 to 10 scale. The same can be done for the food items. When using this method, we will obtain an *intensity scale*, which will help us to decide which wine can optimally be paired with which food.

At the end of this chapter, there are two examples of wine and food pairings, derived from my own experience. Enjoy!

FOOD AND WINE PAIRING MECHANICS: MATCHING TRADITIONS

As pointed out by Enrico Bazzoni, "red wine with meat and white wine with fish" is a basic premise of food and wine pairing. In some cases, it may be a person's entire food-and-wine pairing repertoire. Differing cultures have developed different perspectives on the food-and-wine pairing process and its importance. For example, the traditional French system of pairing dictates a series of rigid rules to follow. The general American attitude seems to be "if it feels good, drink it," leading to the American restaurateur's attitude of "they'll order

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what they like." As discussed in this chapter's Aperitif, the Italian pairing method appears to be based on an understanding of complementary and contrasting elements in food and wine.

All of these pairing systems have merit based on the respective cultural perspectives, tradition, and business models. Each of these systems is based on often conflicting truisms regarding food and wine pairing and the individual differences between restaurant customers. A perfect food and wine combination does not guarantee a happy customer, and there are no perfect food and wine pairings that everyone will love. For instance, a marriage of fine French Sancerre and salty raw oysters will not matter if the person doesn't care for oysters. In pairing for individual guests, there is a significant amount of personal preference involved—servers should select and recommend a range of choices, in terms of both wine type and price. Remember, whether we are talking about weight (as in the case of red wine with red meat) or other food and wine elements, food and wine combinations can be complementary or contrasting. The crisp acidity of a dry Sauvignon Blanc can provide a contrast to a piece of grilled fish much as the juice of a fresh lemon does. A complementary example may be the echo of raspberry in a young Pinot Noir matched with a raspberry reduction sauce. Classic contrasting examples include Sauternes and foie gras or California Cabernet and bittersweet chocolate. Sweet wines and savory foods don't always complement each other but can be magical in some cases.

There are several food and wine combinations that most experts recommend. Some examples are champagne and caviar (the effervescence of the champagne cuts through the salty brine of the caviar), Port and Stilton cheese (appeals to our contrasting senses much like chocolate candy and salty popcorn at the movies), California Chardonnay and lobster (big buttery wine with big buttery lobster), Cabernet Sauvignon and beef or lamb (the classic mellowing effect of rich and fatty meat on full-bodied reds with tannin), and Fumé Blanc and grilled fish or seafood (think fresh-squeezed lemon).

While it is helpful to memorize these basic combinations and general dos and don'ts regarding food and wine pairing, these ideas provide little help in clearly defining the reasons why these are important rules or superior matches. The following chapters provide a set of general principles for understanding the direct and interacting effects of food and wine elements. Unlike rules, they provide guidance in determining the best matching choices for food and wine by considering dominant components, textures, and flavors.⁶ Further, each chapter provides exercises that arm interested students with cost-effective and eye-opening experiences that can serve as a basis for future evaluations.

Food and wine matching may be approached from several perspectives depending on your confidence in selecting wines, your state of mind at the moment, or the objective of the gathering where the food and wine will be served. There are several levels of match: no match, refreshment, neutral, good, or synergistic. All of these matching objectives are useful, and the decision to use one or the other is determined by the situation. The objective of the method in this text is to provide you with a tool kit that allows you to confidently achieve any of these pairing objectives.

No Match The interaction of wine and food when tasted together has a negative impact on the senses. This is common when the food item is high in acidity, salt, bitterness, or spiciness. An example of a no-match situation would be a custard-type dessert such as ice cream, bread pudding, or crème brûlée with a dry, high-acid wine such as Sancerre (Sauvignon Blanc). Clearly, the sweetness of the food and dryness of the wine clash, and this will accentuate the high acidity in the wine, creating a sense that the wine is excessively sour and bitter. A second example is Chinese hot-and-sour soup with a young, tannic Australian Cabernet Sauvignon. The soup is spicy and sour; the wine is astringent, has high alcohol, and is bold. The spiciness and sourness in the soup will create a sharp, astringent, and bitter

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taste in the wine. The high alcohol in the wine will emphasize the spicy character of the soup.

Refreshment Many times wine serves simply as a satisfying refreshment to accompany a certain food choice. In this instance, wine plays a supporting role in the food-andwine relationship, serving as a pleasant, refreshing beverage that accompanies the food choice. The refreshment match may be appropriate when the food choice has characteristics that severely limit any synergistic wine choice. In this case, some of the basic elements of the wine match the food item, but the body and flavors of the food or wine do not match. This is not always a bad thing. For example, highly seasoned or spicy foods may need a refreshing wine to cool and cleanse the palate for the next bite. Or you may be in the mood for a refreshing and relaxing wine to accompany the meal. You do not always need or want to create a concerto of taste transformation for each daily meal. An example of a refreshment match is a spicy dish such as Panang curry. Panang curry is a popular item at many Thai restaurants. It can be prepared with beef, chicken, or pork and includes intensely flavored items such as curry paste, fish sauce, and coconut milk. This spicy and intense dish could be served with a German Kabinett (Riesling) or a Riesling from the Alsace region of France to create a refreshing backdrop.

Neutral Many of the large-production wines on the retail shelf are designed to minimize any poor pairing "damage" and eliminate poor matching situations. These pairing situations are average and pleasant but are missing an element of individuality and thus cannot provide a superior gastronomic experience.⁷ Also, in many cases, you may be hosting or attending a gathering that has a wide variety of food choices (such as a potluck dinner); neutral pairing may be desirable in these situations so that the wines selected will go reasonably well with a wide range of food styles and cuisines. A neutral match could be created by serving a largeproduction, unoaked Chardonnay such as Almaden, Taylor California, or Turning Leaf with your Thanksgiving feast. The wine in this case serves as a neutral partner to avoid clashing with a diverse collection of food items that can be sweet, sour, bitter, and salty.

Good Match In this situation, you have found a wine that matches the food item's basic components (sweet, sour, bitter, salty) and overall body. The difference between a good match and a synergistic one is that in the good match, the flavors (flavor intensities, spiciness, and flavor styles) do not match entirely. An example of this relationship level is a German Riesling Spätlese Halbtrocken served with baked or sautéed trout. This wine is very food-friendly—fruity, moderately sweet, and well-balanced. Served with the trout, it creates a good or even very good match. To move this combination to the next level, the addition of herbs (such as thyme or basil) or serving the fish lightly smoked and with a bit of horseradish would add a greater balance in persistence and intensity. These additions would also add some great contrasts in flavors—fruity versus herbal, fruity and sweet versus smoky and a little spice.

Synergistic Match The word *synergy*, derived from the Greek *synergos*, means the combined effect of the whole is superior to the sum of the individual parts. In terms of food-and-wine pairing choice, many times synergy is the ultimate objective—the wine and food combine to create a totally new and superior gastronomic effect. This situation is analogous to the musical concerto created by the composer tying together a variety of chords, melodies, and movements into a heightened combined effect on the senses.⁸ The combination of foie gras and French Sauternes, German Eiswein, or Canadian ice wine comes to mind when I think of classic synergistic relationships.

OVERVIEW OF BOOK METHODS

W ine and food experts agree that no one person can be an authority with complete knowledge in wine and food pairing.⁹ There are just too many wines in the world and too many variations in cuisine style, ingredients, and preparation methods for one person to be knowledgeable about all of them. Even so, understanding the basics of wine and food pairing can provide both professionals and the dining public with the keys to properly marry food and wine elements. A central tenet of the method in this text is the concept of a hierarchy of tastes that can assist us when making pairing decisions. The approach used in this food-and-wine pairing process is based on a synthesis of research and literature on the subject and both culinary and sensory perspectives.



Steak and lobster, a traditional combination. Which pairing rule should you follow—red wine with meat, or buttery lobster with a buttery Chardonnay?

KEY ELEMENTS OF WINE AND FOOD: A HIERARCHICAL PERSPECTIVE

Pairing experts do not agree on what is most important in making choices about what wine and food to serve together. Is it the texture or body of the food and wine? Is it the flavors? Or is it primary sensory components (sweetness, saltiness, acidity, bitterness)? Some pairing experts base their choices on a combination of flavors and primary sensory components. For example, they identify six key food flavors (salty, sour/sharp, savory, spicy, smoky, and sweet)¹⁰ and assess food and wine in terms of aromas, flavors, and their intensity.¹¹ In another approach, food flavors are described using a variety of adjectives: *fruity, nutty, smoky, berbal, spicy, cheesy, earthy*, and *meaty*.¹² Primary wine "flavor" descriptors are *dry, crisp, oaky,* and *tannic*, with secondary terms such as *buttery, berbal/grassy, spicy*, and *floral*.¹³ But these arrays of elements to consider when paring wine with food illustrate the difficulty in determining the one key driver behind particular matching choices. For instance, acid in food may be an important consideration, but only when it is above or below average levels. Similarly, flavors may have a significant impact on wine and food pairing only when the length of flavor persistence or the flavor intensity is above the norm.

Based on the established direct effects of the food and wine elements, it is useful to separate these elements into three general categories: main taste components, texture elements, and flavor elements. While these three categories are not mutually exclusive, keeping them separate provides a greater ability to distinguish the key drivers of possible food and wine matches. Designating three categories of elements also allow the evaluator to distinguish between these categories in a hierarchical fashion. The Food and Wine Taste Pyramid (Figure 1.1) illustrates that an evaluation of food and wine elements can be thought of as a hierarchy of tastes, starting with main taste components, then moving to texture and on to flavor.

Components Components can be defined as "very basic elements that correspond to basic sense perception on the tongue."¹⁴ Food and wine components are the foundation for elements that impact the pleasant feeling brought about by the complementary or contrasting characteristics of a positive gastronomic experience. The components most typically perceived are described as sweetness, saltiness, bitterness, and sourness.



Figure 1.1 Food and Wine Sensory Pyramid—A Hierarchy of Taste **Texture** A second key category is the texture inherent in the wine and the prepared dish to be paired. Texture relates to body,¹⁵ power,¹⁶ weight,¹⁷ and structure.¹⁸ The texture of both the food and the wine, whether similar or contrasting, becomes the "glue" or "cement" that holds the structure of the food-and-wine pairing selection together.

Texture is the characteristic in food or wine that creates a specific mouthfeel or tactile sensation in every corner of the mouth rather than a perceptible flavor or taste component identifiable in specific parts of the tongue. Unlike components, textures are relatively easy to identify, and like components and flavors, they can be used to provide similarity or contrasts in matching.

Texture can be described in a variety of ways. In wine, it can be described as thin, velvety, medium-bodied, or viscous. In food, it may be described as grainy, loose, dry, oily, or rough. Temperature can also serve as a texture contrast. Warm or hot foods served with cold wine can provide a refreshing and satisfying contrast. The most common representation of texture is a basic continuum from light to rich. The combinations of food and wine can be similar or contrasting. Pairing food and wine with similar light or rich textures is a safer bet, but contrasts can be effective if the rich wine or food doesn't overpower the lighter pairing item.

Flavors A third category of elements in food and wine is flavors. Flavors and components are sometimes confused, but while components are tied to basic sensory perceptions of the tongue, flavors are closely tied to our perceptions of specific characters inherent in the food or wine based on aroma and taste sensations. Flavors are a result of a retronasal process that occurs when aromas are picked up through the back of the mouth and then flow into the nasal cavity.¹⁹

Flavors act as "architectural elements" of food-and-wine pairing selections. As with a building, architectural elements or flavors add interest and complexity to the overall structure of the food and wine paired. For this reason, flavor elements are placed at the top of the sensory hierarchy. While they are not necessarily the most important element for consideration when determining an optimal pair, they represent a final consideration once the foundation (components) and glue (texture) are determined.

The most common flavor descriptors include *fruity*, *nutty*, *smoky*, *herbal*, *spicy*, *cheesy*, *earthy*, and *meaty*. In terms of pairing importance, the length of persistence and intensity of a specific flavor can have an effect on either the food or the wine. These flavor characteristics can be used to describe either similar or contrasting flavors when referring to a food and wine pair. The food and wine flavor categories used in the evaluation system presented later in this text include dominant flavor(s), flavor intensity, and spicy flavors.

As you progress through the readings and exercises in this text, you will become familiar with key elements of both food and wine as well as how they interact with each other to create a "chord" of gastronomic excitement. Later chapters provide further detail on evaluation methods and help students understand the process of tying the complex elements of a particular dish to the complexity of a certain wine.

A sensory hierarchy is presented throughout this text, providing important information about both wine and food elements. The objective throughout the text is to make the array of terms for these elements as concise as possible and focus on only the key elements of food and wine that are perceptible to the majority of knowledgeable evaluators. This sensory perspective is based on substantial research in this area. The objectives of the process used in this text are to (1) demystify wine terminology and create a method to train palates to identify the primary flavor characteristics of wine and food, (2) provide a method to clearly understand the cause-and-effect relationship of food and wine, (3) establish rating scales of components, textures, and flavors so that individuals will be able to effectively understand, communicate, and rank the levels of these elements over time, and (4) provide a wine and food pairing tool that creates accurate predictions of match levels.

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Components: Dryness or Sweetness, Acidity, and Effervescence (Bubbles)

Figure 1.2

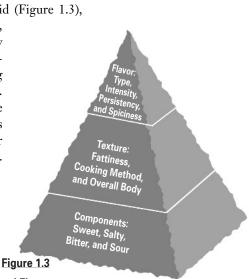
and Overal

Wine Sensory Pyramid The Wine Sensory Pyramid (Figure 1.2) illustrates that wine has three main categories of elements: components, texture, and flavors. Wine also has three primary sensory components that form the foundation for a match with the primary sensory components in a particular food: level of sweetness, presence and level of effervescence, and level of crispness or acidity. There are several things to consider when determining the texture of wine, including tannin level, alcohol content, presence and level of oak, and an overall feeling of body. It should be noted that while oak aging may impact the color, body, flavor, and aroma of wine, its effect on the body of the wine is likely to be a key factor when matching according to the body or power of the food item.²⁰ Primary considerations when determining the flavors of wine include identifiable flavor descriptor(s) or type(s), the persistence of flavor, the intensity of flavor, and any spicy characteristics.

Wine Sensory Pyramid—Components, Texture, and Flavor

Food Sensory Pyramid As shown in the Food Sensory Pyramid (Figure 1.3), primary food components include the levels of sweetness (natural or added), saltiness, bitterness, and sourness of a finished food dish or product. Primary texture considerations include fat level in the protein or additional plate elements (natural or added), the cooking method used, and the overall feeling

of body or texture across all of the food items included in the particular dish. As with wine flavors, primary food considerations include identifiable flavor type(s), the persistence of flavor, and intensity of flavor. Spicy flavors in food and wine can be particularly important for matching purposes, for when the spice level in food goes up, your wine choices become more limited.



Food Sensory Pyramid—Components, Texture, and Flavor

SUMMARY: WHERE DO WE GO FROM HERE?

I he discussions and exercises in this text are designed to provide you with (1) a depth of experience in tasting and evaluating food and wine combinations, (2) the basics of wine evaluation and differences between varietals' characteristics, (3) an understanding of gastronomic identity that is, the impact of history and culture on food and wine choices—and its relationship to wine and food marriages, and (4) knowledge of how food and wine elements interact and transform each other.

The methods used throughout this text will provide you with a tool kit of ideas, concepts, and knowledge to enable you to quickly identify key wine and food elements so that you will be able to properly pair wine and food with confidence. The experimentation method used in the exercises within each chapter presents both traditional and unconventional wine choices/combinations for your consideration. Does a particular wine choice match the food or not? Does this particular pairing choice open your eyes to a surprising new partnership?

Chapter 2 provides an overview of wine evaluation in general and exercises to help reinforce the wine evaluation concepts presented. Chapters 3 and 4 introduce and explore the idea of gastronomic identity. The remaining chapters provide further discussion of the food and wine matching process and exercises to help illustrate how wine and food matches can be predicted and to demonstrate the interactive and synergistic effects of food and wine elements.

DISCUSSION QUESTIONS

- **1.** What are the key motivations for an interest in food and wine pairing?
- **2.** Describe some traditional food and wine marriages.
- **3.** What are the key elements associated with wine and food pairing?
- **4.** Describe the primary wine components, texture, and flavor elements.
- **5.** Describe the primary food components, texture, and flavor elements.

LASSIC ITALIAN WINE AND FOOD EXAMPLES

I he following recipes and wine-and-food pairing examples are derived from Enrico Bazzoni's experience and use the basics of the Italian pairing process. Keep in mind that these pairings are suggestions, and like all pairings, they are impacted by personal preferences. As Enrico points out, "I am very partial to tones of color, for example, and my grades in the examples below are highly subjective. Factors influencing my judgment (and everybody else's) are, among others, experiences, memories, and personal preferences. Readers should remember that they are ultimately the best judges in these matters."

This process gives an overview of similar things to come in this text as you take the road less traveled in wine and food. Enjoy this overview and the classic Italian recipes provided by Chef Bazzoni.

EXAMPLE 1

For this first wine and food pairing example, I have selected a classic wine and dish from the Chianti region. The wine is a Chianti Classico whose origin is within a subregion of the Chianti Classico DOCG in an area between Siena and Florence. The primary grape used in Chianti and Chianti Classico is Sangiovese. The dish (Egg Pappardelle alla Lepre) is a very traditional dish from the Chianti region and is made with wide egg noodles and hare sauce.



Wine: Badia di Coltibuono, Chianti Classico 2003

Organic, hand-picked grapes: Sangiovese 90 percent, Canaiolo 10 percent.

Vintage notes: extremely hot and dry weather.

Table 1.1	2003 Badia di	Coltibuono	Chianti	Classico Prof	ile
					-

Examination	Description	Score out of 10 points
Color	Brilliant. Ruby-red, intense.	9
Nose	Deep, penetrating, alcoholic. Floral bouquet, berries.	9
Taste	Concentrated flavors. Woody, moderate acidity, round and well-balanced. Alcohol level 14%	10
Overall impression	An excellent Chianti Classico with moderate tannins, soft body.	10
Total		38 out of 40 points



Food Item: Egg Pappardelle alla Lepre (Wide Fresh Egg Fettuccine with Hare Sauce)

Yield: 6 servings	Preparation
Ingredients	In a large pot combine the oil and the chopped vegetables.
5 oz (150 ml) extra-virgin olive oil 1/4 bunch parsley, chopped 1 large onion, chopped 2 stalks celery, chopped 2 carrots, chopped 1 hare, cut up into 6 pieces, reserving the head, lungs, liver, and blood 8 oz (240 ml) Chianti 4 oz (120 ml) milk Salt and pepper 1 lb (454 g) pappardelle (wide fresh egg fettuccine) 1/2 c (112 g) grated pecorino cheese 1/2 c (112 g) grated parmesan cheese	Cook vegetables over medium heat until beginning to brown. Add hare parts, including head, lungs, and heart. Reserve liver. Cook until all the liquid from the meat evaporates. Add wine and let cook until it evaporates. Add hare's blood, diluted with a bit of warm water to avoid coagulation. A few minutes later, add milk. Stir well, cover, and let cook until hare is tender. Remove meat, let cool, and bone. Cut meat into bite-size pieces and return to the pot. Add liver, cut up into bite-size pieces. Cook 5 to 7 minutes longer. Add salt and pepper to taste. While hare is finishing, drop pappardelle into a pot of hot boiling salted water and cook for 3 minutes. Drain, dress with sauce, and serve with grated cheeses.

Table 1.2 Egg Pappardelle alla Lepre Profile

Examination	Description	Score out of 10 points
Visual	Deep brown, brilliant hue, with vivid contrast between the noodles and the sauce.	7
Aromatic character	Moderate aromatic character. Deep liver perfume. No spices.	7
Taste:	Deep blend of sweetness from carrots and liver. Lean. Pungent.	9
Overall impression	Rich, satisfying fall flavors. Exotic. Well balanced by noodles and enriched by cheeses, accented with salt (pecorino cheese).	10
Total		33 out of 40 points

The Badia di Coltibuono pairs with this dish perfectly. The moderate acidity of this Chianti Classico balances well with the lean character of the sauce. The wine works well with the hare in the sauce and the natural sweetness of the liver finish. The alcohol content abates the aggressive quality of the hare. Even the colors balance each other: the brilliant ruby of the wine serves as a counterpoint to the deep brown of the sauce.

EXAMPLE 2

This example utilizes a white wine from the northeast region of Alto Adige. The Pinot Bianco grape is used, which produces wines that are light, refreshing, and dry. It is paired with marinated asparagus wrapped in prosciutto. Asparagus, artichokes, and other vegetables in the thistle family such as cardoons are thought by many to be wine killers and can create a bad taste reaction if poor wine selections are made. The Pinot Bianco seems to stand up to the asparagus, debunking this wine "truth."



Wine: Alois Lageder Pinot Bianco—Alto Adige

Grapes: Pinot Bianco

Vintage notes: territory subject to great temperature differences between day and night. Fermentation takes place over four months in temperature-controlled stainless-steel vats.

Table 1.3 Alois Lageder, Pinot Bianco Profile

Examination	Description	Score out of 10 points
Color	Light yellow, brilliant with hint of green reflections.	10
Nose	Fresh and flowery with delicate notes of apple and peach.	9
Taste	Full body flavor, elegant. Moderate finish, lively. Alcohol 12.5%. Acidity medium-low.	7
Overall impression	Very well-rounded wine; excellent balance between body and fresh flavor.	9
Total		35 out of 40 points



Food Item: Marinated Asparagus with Prosciutto di Langhirano

Yield: 3 servings	Preparation
Ingredients 12 spears (about 1 lb [454 g]) fresh asparagus, trimmed 1 tbsp (15 ml) extra-virgin olive oil 1 tbsp (15 ml) balsamic vinegar 3 tbsp (45 ml) red wine vinegar 12 thin slices prosciutto	Place the asparagus into a pot of boiling water Cook for 1 minute, then immediately place them into a pot of lightly salted chilled water with ice cubes in it. Allow the asparagus to cool. Mix the oil and vinegars well to form an emulsion. Drai the asparagus and toss them into the oi and vinegar mixture, making sure they are well coated. Drain excess sauce. Trin the fat from the prosciutto slices. Wrap each asparagus spear with a slice of prosciutto and serve.

Table 1.4 Marinated Asparagus with Prosciutto di Langhirano Profile

Examination	Description	Score out of 10 points
Visual	Brilliant green and red, shiny, translucent. Very appealing.	9
Aromatic character	Very subdued grassy perfume.	6
Taste	Excellent contrast of flavors: fresh grassy asparagus, soft, sweet prosciutto, light salt, balanced by sweet-and-sour quality of sauce.	10
Overall impression	Simple dish delivers an extraordinary charge of flavors in the mouth. Surprising.	10
Total		35 out of 40 points

The Pinot Bianco tames the asparagus' deep grassy flavor and the strong flavor of the dressing. In fact, the wine seems to form an alliance with the soft, salty sweetness of the Prosciutto di Langhirano. The wine and food elements balance each other perfectly.

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