

SECTION ONE

CHEESE TASTING AND APPRECIATION

In this section you will find a discussion of the terms used to describe cheese flavor and texture, and information on how to taste cheese.

Having a well-developed sensory vocabulary goes a long way in helping to describe the nuances of cheese flavor to customers. In addition, telling the “story of the cheese” and using clear, enticing descriptions can enhance the tasting experience. California cow’s milk cheeses offer a range of flavors, textures and styles. Using sensory words to describe the cheeses will help when communicating about them and in determining personal preferences.

THE FLAVOR DYNAMICS OF CHEESE

When we eat, we use all of our senses: hearing, sight, touch, smell and taste. These senses translate into our responses to what we eat: appearance, aroma, texture and flavor. The language we use to describe the flavor dynamics of cheese refers to these sensory experiences.

Appearance

When first looking at the cheeses, note the nuances in color, ranging from pale white to ivory, to buttery, golden or blue-streaked. Notice the moisture in the cheeses, causing them to range from soft and spoonable to firm or crumbly.

Words that describe appearance are: soft, runny, hard, crumbly, dry, moist, smooth, rough, crusty, moldy, white, yellow, ivory, orange.

Aroma

The aroma of cheese is created by many factors including the cow's feed and the butterfat content of the milk, as well as type of starter culture and enzymes that the cheese recipe contains. The length of time the cheese has been ripened or aged helps to intensify its aroma, as does the amount of salting it receives.



Cheesemakers closely monitor the ripening of the cheese.



Cheese can be aged from a few months to several years.

“Before putting a piece of cheese into your mouth, sniff it as you would a glass of wine. Take the first bite, breathing a little air into your mouth so the aroma fills the whole nasal passage.”

Before putting a piece of cheese into your mouth, sniff it as you would a glass of wine. Take the first bite, breathing a little air into your mouth so the aroma fills the whole nasal passage. Notice any scent that distinguishes the cheese. Aroma and taste will combine to give you the flavor of the cheese.

Words that describe aroma are: mild, delicate, milky, fresh, creamy, salty, sweet, strong, pungent, earthy, moldy.

TEXTURE

Cheese ranges from very soft to very hard, with semi-soft, firm, and hard somewhere in between the two extremes. The higher the moisture and milk fat of a cheese, the smoother the mouthfeel. In addition to smooth (Monterey Jack, high-moisture Mozzarella, Queso Panela), cheese texture can also be creamy (Mascarpone, Fromage Blanc, Crescenza, Teleme), crumbly (Feta, Cotija), very hard (Dry Jack, Aged Gouda), or stringy (low-moisture Mozzarella, Oaxaca). Texture is also an indication of ripeness with many soft-ripened bloomy rind cheeses; the riper the cheese, the softer or creamier it will be.

Rub a tiny piece of the cheese between your fingers to feel the difference between soft, semi-hard and hard texture. Notice the moisture or dryness of each sample. Don't chew and swallow quickly, but move the cheese around in your mouth to expose it to all your taste buds. Notice that some will coat your mouth and others leave a clean palate.

Words that describe texture are: soft, firm, hard, moist, runny, crumbly, granular, creamy, buttery, rubbery, waxy, oily, chalky, spreadable.



Smooth - Monterey Jack



Very Hard - Dry Jack



Crumbly - Feta



Stringy - Oaxaca



Creamy - Crescenza

Taste

Food has both flavor and taste. You may find that a cheese tastes quite different in your mouth from the way it smelled when you held it to your nose. Flavor is the quality that is usually a blend between taste and smell sensations. Taste refers to the sense perception we receive via the taste buds: sweet, sour, bitter and salty. Food scientists now accept a fifth taste, umami, the savory taste often associated with L-glutamates naturally occurring in foods such as mushrooms, meat and seafood, and in milk and cheese. Drying or fermenting foods seems to concentrate their “umami” flavors. Notice umami when comparing a young cheese to its aged counterpart.

Slowly working the cheese around your mouth, notice which tastes are apparent first, then which tastes develop later and which, if any, linger. Words that describe taste are: sweet, mild, milky, buttery, delicate, salty, sharp, acidic, tart, tangy, lemony, bitter, nutty, piquant, smoky, yeasty.

CHEESE TASTING GUIDELINES



Fine cheeses artfully presented enhance the dining experience.

Each time a new cheese is tasted, make notes about its appearance, aroma, texture and flavor profile. Whether tasting one or several cheeses, use the following guidelines:

Temperature

Taste all cheese at room temperature except for fresh cheeses, which should be cold.

Mild to Sharp, Soft to Firm

Tasting cheese from mild to sharp will prevent the palate from being overwhelmed, enabling you to appreciate the more delicate nuances in mild cheeses. Tasting softer cheeses before the harder types reveals the development of flavor through aging.

Thin to Thick

Take a thin shaving of each cheese and let it melt on your tongue. Then try a large piece that requires chewing. Note the ways the same cheese can taste different.

Cheesemaker Stories

Learn about the cheesemaker who made the cheese, where the plant or farm is located, and even the breed of cow. The story of the cheese and its producer gives colorful background to the style of cheese being made.

Pairing Ideas

After determining the flavor profile of each cheese, consider pairing complementary or contrasting ingredients with the cheese. Contrast a salty cheese with the sweet flavor of dates, reduced balsamic vinegar, or dried or ripe fruit. Complement a milder cheese by serving nut breads, sundried tomatoes or salty nuts.

SECTION TWO



California produces more than 250 varieties and styles of cheese, many of them specialty cheeses.

MERCHANDISING CHEESE FOR RETAIL

In this section you will find ideas that contribute to developing a successful cheese program in a specialty cheese shop or grocery store. Communicating the romance and excitement of cheese, staff training, creating displays and selling well-matured cheeses are discussed.

Staff Training. The success of your cheese program depends on good service and accurate cheese knowledge. Hold staff tastings as often as possible. Go to [*Cheese Tasting and Appreciation*](#) for information on the flavor dynamics of California cheese. Let the staff taste cheeses side-by-side and describe the flavor and texture differences so they can confidently give this information to customers. Learn which cheeses are best for party cheese trays or for cooking and approach customers by asking how they plan to use the cheese.

Tell the Cheese Story. A successful cheese program communicates the romance and excitement of cheese. Give customers information about where the cheese is made, the breed of cows used, its history, who makes it and any special techniques the cheesemaker uses. For information, cheese producers often have websites with details about their operation, or look for printed materials that arrive with the cheese and tell the story.

Cheese and Wine. In stores that sell wine, provide staff with guidelines on matching wine with cheese selections. Write wine pairing ideas on the back of cheese signs in the case to remind staff. Suggest wine and cheese as hostess gifts. For pairing tips, go to [*Cheese and Wine Pairing*](#).

Service. One of the services a good cheese retailer can provide is to help customers discover how to use new cheeses. Often, the customer needs help creating an interesting cheese plate for entertaining. The occasion might be a before-dinner cheese selection, a formal cheese course for a dinner party, or a tray for a reception. Suggest varieties of cheese that go well together. Advice about aesthetics such as shape and color and selection of accompaniments for a cheese tray are valuable services. If the customer is looking for cheese to use in a recipe, it's important to help them find the cheese requested in the recipe, or a reasonable substitute. Use this opportunity to introduce them to other cheeses that are good for cooking. If possible, customers should be allowed to sample the cheeses and begin to understand the flavors they prefer.

“Effective cheese retailing means being a good storyteller – describe the cheesemaker, what is unique about the flavor or heritage of the cheese, or how it can be used.”



A dramatic retail display will catch the consumer's eye.

Merchandising

Retail styles vary from hand selling cut-to-order cheeses, to ready-cut cheeses that are available in self-service cases.

At a cheese counter where many cheeses are on display and customers' selections are cut to order by knowledgeable staff, the exchange between patron and cheese seller provides an opportunity to demystify the world of cheese. Sales staff should begin an active dialogue with each customer to help guide their selection. A clear description of the cheese on signage in the display case will encourage customers to inquire about a cheese, and a sampling before purchase will help the customer try unfamiliar cheeses.

Displays. Every store has guidelines as to size and style of cutting cheese for display. Cut cheese needs to be rotated to assure only good quality cheese is sold. Newly cut and wrapped cheese should be stacked behind cheeses already in the display. For information about dealing with mold on cheese, go to [*Sourcing, Storing and Handling Cheese.*](#)

In a cheese case that displays pre-cut and pre-wrapped portions, good merchandising practices involve paying close attention to several basic but very important areas:

Effectively facing the case for maximum sales impact. With good planning, or simple diagrams, service cases can position cheeses in a way that makes sense to the customer and results in maximum sales. A common practice is to group cheese by type (fresh, soft-ripened, hard, etc.). The case should provide an appearance of abundance, position cheeses within easy reach of the customer and present cheese with the face of the cheese showing.

When replenishing the case or display, write down what cheeses need to be cut and then plan to cut by family of cheese. Wash your cutting board and sanitize between cutting each family so the integrity of the cheeses aren't compromised. Follow store guidelines for cutting sizes based on weight or price.

Creating signs that inform and sell. Signs are important even when a sales person is on hand to answer questions. Assume that most customers do not know much about cheese beyond the most common types, but the growing interest in cheese means they want to know more. Make signs clear and interesting to read and your customers will take the time to read and buy. Signs should give the name of the cheese, a brief description of its style and flavor, where the cheese is made, and the price. Use the Real California Cheese seal on your signs to leverage the growing awareness of consumers for these fine cheeses.

CREATING RETAIL SIGNS THAT SELL

Assume that most consumers do not know much about cheese beyond the most common types. To create signs that sell:

1. The name of the cheese should be prominent.
2. Make the price easy to read.
3. In the remaining space, tell a story. It can be about the cheese's flavor or history, or a serving suggestion.
4. Include the Real California Cheese seal to let customers know the cheese is made in California with high quality California milk.



Sell Well-Cared-for Cheese. Retail stores offering a large selection of cheeses must provide the highest level of care, mindful of the storage and handling needs of the different types of cheese. See [*Sourcing, Storing and Handling Cheese*](#) for a discussion about protecting cheese quality.

Ripening cheese is another important consideration. Aged and semi-hard cheeses typically arrive ready for sale, but often the cheese is still developing flavor while it's in your store. The younger, soft-ripened cheeses may need a few days to recover after shipping but will typically reach peak ripeness in a fairly short amount of time. Retail stores that include a special ripening area overseen by an experienced person can keep the cheeses properly rotated. Trained staff can guide customers to select cheese that will be ripe when the customer needs it, either that day or in a few days. A cheese that is perfectly ripe should be prominently displayed for quick sale.



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MERCHANDISING CHEESE FOR RESTAURANTS AND FOODSERVICE

In this section you will find ideas for promoting cheese in restaurants and foodservice operations through staff training, adapting the style of cheese course to your operation and marketing cheese throughout the menu.

Staff Training. How you let your customers know about the fine cheese selection you offer is the first step to a successful program. The expertise and enthusiasm you instill in your staff will communicate that excitement to your customers. To cultivate a savvy staff, hold meetings to introduce new cheeses. Go to [*Cheese Tasting and Appreciation*](#) for tips on how to help staff describe the flavors and types of California cheese. Prepare a tasting that includes each of the types of cheese. Let your staff practice with the sensory words they'll use to describe the cheese to customers.

Tell the Cheese Story. Customers are usually interested in learning about new foods and cheese is among the most popular and mysterious. Talk about where the cheese is made, who makes it and any interesting techniques the cheesemaker uses. Tell the story of how the cheese came into being, like the “accidental” creation of Dry Jack. Explain what the customer may like about the flavor and texture and how a cheese might complement the wine being served. Cheese producers often have websites with information about their cheeses that can be helpful.

Cheese and Wine. Serving cheese at a restaurant can provide an opportunity to sell an extra bottle or glass of wine, liquor, dessert wine, port or sherry. Teach the staff to match wine with the cheese selections. Introduce new wines and cheeses by offering them as paired specials for your customers. Hold cheese and wine tastings to keep the staff current with the selection and help them sell wines. For more tips on pairing cheese and wine, go to [*Pairing Cheese and Wine*](#).

Serving Well-Ripened Cheese. To serve cheese at peak ripeness, a restaurant can invest in a cheese ripening program overseen by an experienced person, or identify good providers who can consistently deliver ripe cheeses. As mentioned in [*Sourcing, Storing and Handling Cheese*](#), it's important to buy fine cheese from a specialty food distributor or a local cheese retailer that is prepared to meet a restaurant's special needs.

Whether served as a first course or dessert, cheese is best when served at room temperature. It needs to be removed from refrigeration an hour or

“How you let your customers know about your cheese selection is the first step in a successful program.”

so before serving. (The exception is fresh cheese, which should be refrigerated until use.) The kitchen staff should estimate how many cheese courses will be served and set out the cheese to allow it to come to room temperature (but not kitchen temperature). Cheeses served from a cart or tray displayed in the dining area should be refreshed throughout service and covered with a glass or plastic dome when appropriate.

The Cheese Course Throughout the Menu

One advantage of serving a cheese course in a restaurant is its flexibility. The cheese course can make an appearance as an appetizer, after an entrée or as a dessert. Bars and cocktail lounges can serve interesting cheese pairings to accompany drinks or as small plates on the menu. Served early in the meal, a simple composed cheese course awakens the appetite. Served after the main entrée, it offers a chance to linger and extend the pleasure of a meal.

Before the Meal: A Starter Course. A cheese course before, or at the beginning of the meal, serves to stimulate the taste buds. Cheese can be prepared as an informal small plate or to serve with cocktails at the bar. A serving may include one or more cheeses served at room temperature. Consider such accompaniments as cured olives, pickled vegetables, salted whole nuts, crunchy crudités, roasted or grilled seasonal vegetables, chutneys, mustards and tapenades. Another option is serving cheese fried in crisps, or baked in a crust of coarsely ground walnuts or almonds.



A number of restaurants find a cheese cart creates interest in cheese. When not in use, park it in a prominent area where diners will see it as they are led to their tables.

Mid-Meal: Transitional. A recent trend pairs a single cheese with a savory accompaniment before or after the entrée. In restaurants, this course is often included in a prix fixe menu of several courses, or as part of a tasting menu that includes several small servings of various selections from throughout the menu, including a cheese course.

End of Meal: In Place of Dessert. A delicious selection of fine cheeses satisfies the appetite and helps to imprint a lingering memory of a fine meal. Many cheeses pair exceptionally well with fresh and dried fruits. Choose seasonally available apples, pears, figs or berries, nuts (walnuts, almonds, hazelnuts, pecans and pistachios), honeys, and dessert wines such as sherries, ports and brandies. For a party that has finished their meal but not their wine, suggest a cheese that would pair well and extend the enjoyment of their wine.

Today's cheese course appears throughout the menu — from appetizer to traditional end-of-meal cheese course. Here are some examples of the cheese course:



The Restaurant Menu

The menu itself is one of the best ways to communicate cheese information to diners. The menu can convey the range of cheeses you serve and their pairings along with flavor descriptions and stories about each one. Menus provide the perfect way to announce a unique approach to serving cheeses, such as a featured cheese of the week, a seasonal pairing or the chef's recent discovery. A cheese menu given to diners as they are seated gives cheese a prominent role, suggesting that it can be part of the start, middle or end of a meal. Knowing early that they want to try your cheese selection helps diners order their meal accordingly. Techniques such as numbering the cheeses, printing phonetic spellings, and including the origin and flavor profile of a cheese will put customers at ease. Cheese menus can be presented early, with the wine and dinner menus, or before dessert. When bringing the cheese to the table, servers can point out, or circle on the cheese menu, the varieties being served. They can also suggest that customers take their cheese menus home to help remember the cheeses they enjoyed.

Cheese Service

One way to support and encourage cheese sales is to display cheeses where customers can see them. Cheeses can be placed on cloth-covered ice to keep them somewhat cool. Covering the display with a glass or plastic dome can keep cheeses from drying out and enable them to maintain a fresh appearance. To minimize waste, display small amounts of cheese and replenish the display frequently throughout service.

Some restaurants simply present a pre-selected list of cheeses for the day. Others allow customers to choose cheeses from a cart or cheese board, or a fromager (cheese steward) might make suggestions and serve. A trained fromager or server will be able to keep the cheeses looking good, inform customers about the varieties and assure standard portion control. In some restaurants, the sommelier oversees the cheese service, with the advantage that he or she will be able to recommend wine selections that complement the cheeses. Remember to allow aged cheese to sit for about an hour at room temperature before serving, but fresh cheeses should be treated like milk and kept cold until serving.

THE CONTEMPORARY CHEESE COURSE

The cheese course remains a growing trend in American dining and entertaining. Restaurants across the country now regularly offer a cheese course. Chefs are making artisan cheese even more enticing by serving it with handmade breads, fruit compotes and salsas, and by creating both savory and sweet pairings. At home, serving cheese before or after dinner and creating cheese platters for parties has sent customers to retail and specialty cheese counters for fine cheese and advice in serving.



Cheese Course Basics

In many European countries, it has long been the custom to enjoy a cheese course before, or in place of, a sweet dessert. In England, it follows the main course and is frequently accompanied by savory biscuits and port. In Italy, a cheese course, paired with sliced salami, is often served as an appetizer. The cheese course may have its roots in France, where it has long been considered the ideal complement to an unfinished bottle of wine at the end of the meal. A cheese course composed for a restaurant menu should follow these basic guidelines:

Selection. As with most things, it's best to start simply. Begin by offering one to three cheeses with varying textures, colors and flavors, cut into interesting shapes. Serving three cheeses does not challenge the palate with too many flavors, yet provides good variety and contrast. Offer a range of flavors and textures from soft and mild cheese to hard and very sharp or pungent. Alternatively, even serving one cheese at its peak of flavor, paired with a beautifully prepared savory or sweet accompaniment, can be a highly satisfying experience.

Quantity. Estimate one to one-and-a-half ounces of each cheese per person. If serving three or more cheeses, you might decrease the amount to an ounce or less per person. Cheese courses typically contain just small amounts that provide a combination of flavors to stimulate the dinner appetite, or extend the pleasure of a satisfying meal.

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Presentation. Interesting plates, wooden or marble platters, straw mats and wicker or ceramic trays will accommodate most serving occasions. Use seasonally available fresh herbs and greens. Presentation ideas are endless, inspired by personal style, the season and the occasion.

Tools. Be sure to cut cheese with the proper tool. Any sharp utility knife will work to cut and serve a semi-soft or semi-hard cheese. Curved prong-tipped knives or special cheese serving knives with wide blades for hard cheeses and open-hole blades for soft cheeses are available from culinary equipment suppliers. Cheese planes are essential for shaving thin slices. A long, sharp chef's knife is best for cutting wedges from a wheel. For cutting whole wheels or whole blocks, use a large double-handled knife or a cheese wire for the initial cut.

CHEESE CUTTING AND HANDLING

The Cheese Wire

Cheese wires are useful in cutting cheese easily and with minimum waste. The wire's narrow surface reduces the amount of waste resulting from cheese adhering to the cutting tool. Large wires are effective for breaking up larger wheels or blocks. Small wires are ideal for soft cheeses like Brie and Blue.



Provided courtesy of United States Dairy Export Council

CHEESE CUTTING AND HANDLING

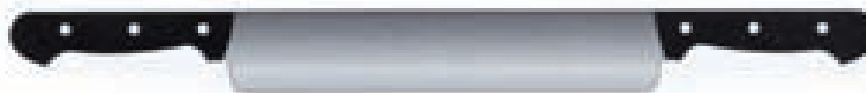
The Single-Handle Offset Knife

Used for cutting small pieces of semi-soft cheeses such as Monterey Jack, Cheddar, Edam and Gouda.



The Double-Handle Knife

Used to safely cut blocks of firm cheeses such as Cheddar, Colby, Parmesan, Romano and Swiss.



The Cheese Spade

Used to cut slices of firm or semi-soft cheeses such as Monterey Jack, Mozzarella and Brick.



Provided courtesy of United States Dairy Export Council

SECTION FOUR

SOURCING, STORING AND HANDLING CHEESE

In this section you will find a guide to the complete selection of California cow's milk cheeses and their sources, a checklist to use when receiving shipments of cheese, and a guide to storing various types.

To obtain the best quality cheese in the best condition, it's always advisable to buy from a reputable and responsive cheese distributor or wholesaler, or to order directly from artisan and farmstead cheesemakers.

Receiving and handling cheese properly requires special care, as this section outlines. You'll also find simple methods for storing cheeses that will preserve their flavor and appearance.

The five types or families of cheese described below offer a wide range of California cow's milk cheeses, including fresh, soft and soft-ripened, semi-hard and hard, very hard, and spiced and flavored cheeses.

Sourcing Cheese

For a complete list of all the California cheesemakers, including addresses, phone numbers and types of cheeses, go to [California Cheesemakers](http://www.RealCaliforniaCheese.com) at www.RealCaliforniaCheese.com.

With more than 250 varieties and styles of California cow's milk cheeses to choose from, selecting the right cheese can sometimes be daunting. You might first consider the following:

Will the cheese be used for cooking, as an ingredient, or on a cheese board? Consider the visual appearance and ripeness of the cheese more carefully if it will be served alone or with other cheeses and not grated or melted.



“The goal of cheese handling and storage is to keep the cheese at the peak of flavor until it is served or sold.”

How much to buy? If planning a cheese course, estimate one to one-and-a-half ounces of each cheese per person. If serving three or more cheeses, decrease the amount to an ounce or less per person. Cheese courses typically contain small amounts of cheese that provide a satisfying combination of flavors, whether before or after the main course.

For cooking, consider how much you will need for each recipe.

Fresh cheese needs to be used immediately, or by the expiration date on the package. If stored properly, soft-ripened and bloomy-rind cheeses can be kept for up to a few weeks, and semi-hard or hard cheese will keep for an extended period. (See Storage Practices, following)

For restaurant cheese buying, contact a local distributor who specializes in fine foods and perishables. Dealing direct with the producer is a good option when the producer is small and distribution is not available. Local specialty cheese shops will sometimes offer a discount to restaurants in the area.

For retail cheese buying, wholesale distributors are a primary resource, independent distributors of niche products offer specific types of cheese, and going direct to producers is an option if freight costs are not prohibitive.

Handling and Storage Practices

The goal of cheese handling and storage at the restaurant and retail level is to keep the cheese at the peak of flavor until it is served or sold. Sometimes a cheese is delivered that has been adversely affected by shipment – such as having been subject to wider swings in temperature than are ideal.

Proper handling can repair the damage and coax the cheese back to its full flavor potential. The following information outlines basic cheese handling and storage practices for the professional kitchen or cheese retailer.



Proper handling and storage greatly affects cheese flavor.



A cheese wire comes in several forms and is valuable in cutting wheels, blocks, or large pieces of cheese.



An undercounter refrigerator or wine cooler can be turned into a small cheese cave for storing cheese in a restaurant.

RECEIVING THE CHEESE

When a cheese is delivered, it should be refrigerated immediately. Here is a standard checklist for receiving cheese:

- Check the cheese shipment immediately upon arrival.
- Check the price on the invoice and correct any mistakes.
- Weigh each piece and check for accuracy.
- Inspect carefully to be sure the cheese wrappers are unbroken and the cheeses feel cool to the touch. If you have any doubts, use an instant-read thermometer. Do not accept cheese if the internal temperature is over 55°F.
- Date and refrigerate the cheeses, noting when they need to be turned.
- Store by family of cheese under the correct conditions, as described in the following section.



Simple guidelines make storing cheese a snap.

Storing Cheese To Maintain Flavor

Following are some general rules for storing cheese in the restaurant or store to maintain flavor.

Temperature: The ideal temperature for storing cheese is 42-50°F.

Humidity: The need for humidity in the refrigerator varies with the variety of cheese, but most do well at 65%. The more humid the climate in the refrigerator, the more friendly it will be to molds. White rinds, bloomy rinds, cheeses with washed rinds and blue cheeses need more humidity and the careful encouragement of their molds. In a walk-in refrigerator, store these cheeses closer to the door where the temperature is slightly warmer and more comfortable for the molds. Other rinds need air circulation and a less humid environment. However, they should not have so much air circulation that their surfaces dry out, as can happen if they're placed too close to the fans. Cheeses that need humidity can be stored in plastic tubs with covers. A small, clean, dampened towel can be added to the bottom of the container to provide humidity. The cover should be opened to exchange air, and the towel changed every few days.



Identify cutting boards to be used only for cheese and carefully clean when switching from one type of cheese to another to prevent cross-contamination of flavors.

Moisture: Higher moisture cheeses (greater than 50% moisture, such as fresh cheeses) should be kept quite cold (42°F), while lower moisture cheeses (less than 50% moisture, such as semi-hard and hard cheeses) can withstand somewhat higher temperatures (up to 50°F).

Wrapping: Once a cheese is cut from a larger piece or wheel, it needs to be protected both from drying out and from getting too little air so it doesn't breathe. If you are wrapping the cheese, use butcher, craft or waxed paper that allows a little air so that the cheese can breathe, but will also help contain some of its moisture for freshness. Very hard and grating cheeses need to maintain some of their moisture since they're already quite dry, so wrapping them in plastic is an option that will slow down their moisture loss. Plastic wrap can transfer flavor to the cut portion of the cheese and it may require scraping before using to remove any off-flavor on the cheese. Cheeses that are shipped in cryovac or heavy plastic should have the plastic removed and be rewrapped so they can breathe. However, some hard cheeses, such as Cheddar, can age anaerobically and will continue to improve over time if left in sealed cryovac.

Storing the Basic Families of Cheese: Family-Specific Guidelines

Each family of cheese has a common moisture content and storage requirement, so by separating the cheeses into families and keeping each family stored in a container, you can create the exact environment needed for freshness or ripening. Here are some family-specific guidelines:

Fresh Unripened Cheeses: (*Fromage Blanc, Fresh Mozzarella, Mascarpone, Ricotta*) These cheeses should be treated just like fresh milk. Store cold and tightly covered to prevent them from absorbing flavors from other foods and use soon after opening. If mold is detected on a fresh cheese, the cheese should be discarded.

Soft and Soft-Ripened Cheeses: (*Brie, Camembert, Teleme, Crescenza*) Store these cheeses in their original wrapping only if they are delivered in specialized plastic cheese wrap with aeration holes and tissue liner (this style of wrapper successfully regulates the cheese's moisture and is increasingly used for cheeses such as Brie). Foil is also acceptable. Store these cheeses in the refrigerator's warmer places.



Cheese storage need not be costly. Inexpensive plastic containers, properly prepared, provide ideal storage in a walk-in.

“Some hard cheeses, like Cheddar, age anaerobically and can be stored in sealed cryovac.”

One method some restaurants use is to store the cheese, unwrapped, in tight-fitting plastic containers. First, line the container with Vexar, the plastic matting found on supermarket produce shelves, then place the cheese inside – segregating them by type – and add a small piece of moistened paper towel or cloth towel in the corner to increase humidity, or a dry piece of paper towel to absorb extra moisture. When using this method keep each cheese type separate from the other types, especially white rind, washed rind and Blue cheeses. Open the containers daily to allow the cheese to breathe, and change the towel regularly.

Semi-Hard and Hard Cheeses: (*Cheddar, Monterey Jack, Gouda*)

For storage, unwrap hard cheeses from plastic wrap and rewrap in butcher, craft, waxed paper or foil. Store on Vexar in tightly covered plastic storage bins. These cheeses can be stored in a cooler region of the refrigerator, but not in the coldest part. With cut cheeses, you can rub the surface lightly with olive or vegetable oil to prevent drying, if you wish.

Very Hard Cheeses: (*Dry Jack, Aged Gouda, Aged Cheddar, Cotija*)

For very hard cheeses, use a simple covering of waxed paper or place them in a clean, empty plastic storage container. Some firm and crumbly cheeses, such as aged Cheddar, benefit from “sealing” (i.e., drawing the flat surface of the knife over the cut surface of the cheese to close up pores and prevent moisture loss). Do this before wrapping or placing in the container. Keep the cheese stored in a cold, but not too humid part of the refrigerator, such as the lower shelves where a hard cheese’s heavier weight will not be as much of a problem. Again, with cut cheeses, you can rub the surface lightly with olive or vegetable oil to prevent drying, if you wish.



Dealing with Mold

All molds were once thought to be harmless and simply a cosmetic problem. Now we know that while most molds are harmless, some molds may produce toxins that can seep into the cheese. With this in mind, the best practice is to make every effort to keep mold from forming. Conditions that encourage mold growth include storage under excessively moist or warm conditions, poor handling, poor sanitation practices at workstations and inadequate wrapping.



Trim moldy cheese one-quarter to one-half inch beneath deepest mold penetration.

“Wipe down all work surfaces in between cutting the different types of cheese.”

Dealing with Mold (cont'd)

Generally, the same handling and storage practices previously recommended for maintaining overall cheese quality are also good steps for preventing unwanted mold. Along these lines, cheese experts recommend against leaving cheese exposed to room temperature for more than four hours. Warm temperatures will stimulate mold growth as well as cause the cheese to sweat and eventually dry out.

Should mold form, trim the cheese one-quarter to one-half inch beneath the deepest mold penetration. If mold has spread to larger patches, you may have to cut away the entire section and discard it. Small pieces that become fairly moldy should be discarded.

HANDLING CHEESE: GOOD WORKSTATION SANITATION

Always maintain good sanitary practices at cheese cutting stations to prevent undesirable bacterial contamination. Here are some sound practices:

- Label cutting boards to be used only for cheese to prevent cross-contamination of flavors among different foods.
- Wipe down all work surfaces in between cutting the different types of cheese. Use a clean towel dipped in a mixture of one-tablespoon bleach to one-gallon water to sanitize. Measure this carefully, as too much is not a good thing. Also be sure to wash your knives between cutting different types of cheese.
- When you switch between different families of cheese and at the end of a shift, use a bench scraper on the cutting boards to remove any residue and wipe down all surfaces with the sanitizing solution.

SECTION FIVE

ABOUT CHEESE AND HOW IT'S MADE

In this section you will find information on the origins of California cheesemaking, how cheese is made and the different types of cheese made in California.

Throughout history, people have developed ingenious ways to preserve foods. Cheese is the delicious result of preserving the nutrients in milk. It's made throughout most of the world and some of the finest come from California, a center of U.S. cheesemaking.



Starter culture allows milk to coagulate into curds and whey.



Fine cheesemaking remains a hands-on process.



Some cheeses are salted and brined as part of the ripening process.

THE STORY OF CALIFORNIA CHEESE

As with the state's wine industry, the history of California cheesemaking goes back to the days of the Spanish missionaries more than 200 years ago. The early missionaries brought many varieties of fruits and vegetables. They also brought cattle and, with their milk, began making cheese.

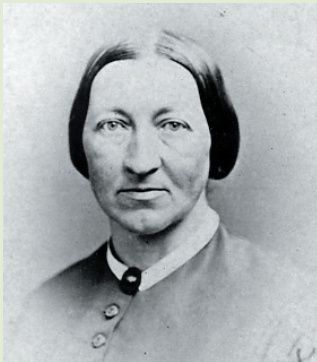
The Spanish influence continues in California cheesemaking today. Monterey Jack, a popular California cheese, is a direct descendant of the early mission cheeses, and today California produces more Hispanic-style cheeses than any other state. In all, California produces more than 25 Hispanic-style cheeses such as Queso Fresco, Panela and Cotija.



California cheesemaking dates back more than 200 years, to the days of Spanish missionaries.



Monterey businessman David Jacks is credited with popularizing Monterey Jack cheese.



Clarissa Steele, matriarch of a Marin County dairy family, produced the first commercially marketed California cheese in 1857.

CALIFORNIA CHEESE HISTORY HIGHLIGHTS

- 1769** Father Junipero Serra introduces cheesemaking to the region.
- 1800** California exports cheese to Russia's Alaska settlements.
- 1850s** Gold Rush pioneers arrived in California with dairy cows tied behind covered wagons. California's milk cow population swells to 100,000 by 1860.
- 1857** Near San Francisco, Clarissa Steele makes the first commercially produced California cheese.
- 1882** Monterey Jack, a California original, is born; named for David Jacks, the Monterey businessman who first commercially marketed it.
- 1915** Dry Jack is created when Monterey Jack is left in storage for a long time. Italian-American families quickly adopt it as an alternative to the Italian hard cheeses.
- 1920s** Greek immigrants develop Teleme, another California original.
- 2005** California cheese production surpasses two billion pounds annually.

HOW CHEESE IS MADE: THE BASICS

Cheese is milk curd that's been cultured and usually aged. It can be made from whole milk, low-fat, nonfat, buttermilk, cream, whey, nonfat dry milk, or a combination of these products. (For a video showing the cheesemaking process, see the [cheesemaking virtual tour](http://www.RealCaliforniaCheese.com) at www.RealCaliforniaCheese.com.)

The process starts by testing the milk according to U.S. government guidelines. It is standardized for fat and protein levels and then usually pasteurized. Coagulant and starter culture are added to the milk to form curds and develop flavor. Some specialty cheeses are made with unpasteurized milk. These are called "raw milk cheese." Government regulations say raw milk cheeses are safe to eat after 60 days of aging.

The curds are cut, stirred and heated to achieve the desired texture. Whey, the cloudy liquid left as the curds form, is drained off. Then the curds are salted and knitted – or manipulated – in different ways to produce different types of cheeses. For example, they're stretched to make Mozzarella, and stacked and turned for Cheddar.

Finally, the curds are put into molds. The shape of the mold used varies according to the type of cheese being made; for example, hoops produce cylindrical cheeses, rectangular containers are used for block cheeses, and traditionally-made Monterey Jack wheels are produced in cloth bags.

Many cheeses are then placed in a salt brine bath to help form a rind prior to being moved to a ripening room. For more information on how cheese develops flavor during the cheesemaking process, go to the [*The Art of Flavor Development in Cheese*](#).

HOW CHEESE IS MADE: THE FIVE TYPES

The five families of California cheese differ according to fat, moisture content and natural flavoring. Different recipes, enzymes, coagulants, handling and aging also determine type. Within each type are many varieties.

Fresh Cheeses are young cheeses that haven't been allowed to age. They're high in moisture because they are gently placed in containers that allow them to drain without any pressure. The curds therefore retain much of the whey. Examples include Fromage Blanc, Ricotta and Mascarpone.



Fresh cheese

Soft and Soft-Ripened Cheeses

characteristically have a high moisture content. Soft-ripened cheeses such as Brie and Camembert ripen inside of a fluffy white rind and become softer and creamier as they age. Soft cheeses, such as Crescenza and Teleme, have little or no rind. Mild when young, most of these cheeses typically develop a fuller flavor as they age.



Soft-ripened cheese



Semi-hard cheese

Semi-Hard and Hard Cheeses contain less moisture than fresh or soft cheeses and texture can range from semi-firm to very firm. While there are many production variations that determine a cheese's ultimate characteristics, most cheeses in this category are made with curds that are cut, molded and pressed. Unmolded, the cheese is then allowed to age. Popular examples include Cheddar, Monterey Jack and Gouda.

Very Hard Cheeses are very dry and the hardest of all types. Because of their hardness, they are also called "grating cheeses," and the more aged versions may acquire a crumbly or crystalline texture. Cheeses in this category are typically aged at least six to 12 months, and in some cases may be aged up to several years. Examples include Dry Jack, Aged Cheddar and Aged Gouda.



Hard cheese



Spiced and flavored cheese

Spiced and Flavored Cheeses are an old tradition and one that has become a specialty of California cheesemakers. They are created by adding natural spices or herbs after the curds are cut and the whey is drained, but before pressing. Jack and Cheddar are popular cheeses available in many different flavors, as are Gouda, Feta and Brie. Popular flavors include Jalapeño, peppercorn, cumin, garlic and sage.



Over half of California's more than 50 cheesemakers produce specialty, artisan or farmstead cheeses.

HOW CHEESE IS MADE: FARMSTEAD AND ARTISAN CHEESES

Farmstead and artisan cheeses differ from commodity (mass-produced) cheeses in that they are made by hand in much smaller quantities. These specialty cheeses can vary according to season and region, just as wines do. Their subtle variations are part of their appeal.

Artisan vs. Farmstead

The term “artisan cheesemaking” describes cheese made by hand in small quantities in a way that respects the tradition of the cheese. “Farmstead cheesemaking” refers to cheese made on the farm using only the milk from a cheesemaker’s own herd.

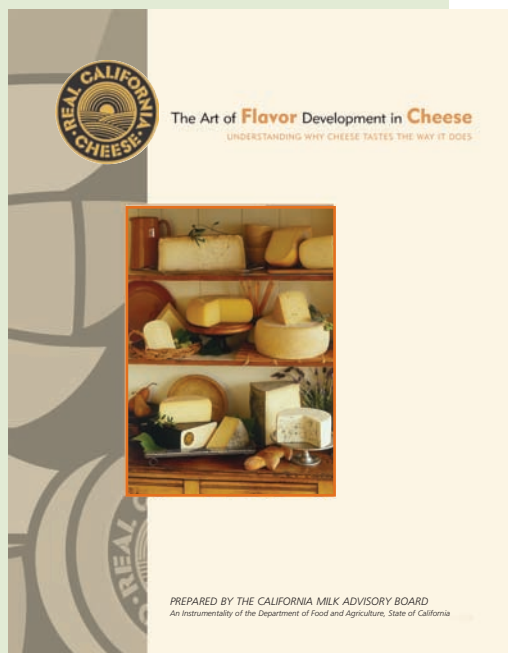
To Locate a California Cheesemaker

Go to the Real California Cheese website for a list of all [California cheesemakers](#) and the cheeses they produce. This site also lists cheesemakers who sell direct – by mail order or through the web. This is a good way to obtain cheese from some of the smaller cheesemakers who have limited retail distribution or do not produce cheese in large quantities.

For More Information On Cheesemaking

If you would like more information on how cheese is made, go to [The Art of Flavor Development in Cheese](#). This document was developed by the California Milk Advisory Board for food professionals and provides a comprehensive look at the major steps in cheesemaking and discusses their influence on flavor development.

We also list a number of books and references describing cheesemaking in [Suggested Reading](#).



SECTION SIX

PAIRING CHEESE AND WINE



In this section you will find general guidelines for pairing cheese with wine, suggestions for wines that are good cheese partners and a discussion of how cheese can affect the flavor of wine.

Cheese and wine are both living foods that are made through fermentation processes. Both are ancient foods and classic partners whose flavors vary seasonally and change as they age. This makes the pairing of wine and cheese a delightful but sometimes challenging pursuit. The pleasure of eating a good cheese can be enhanced when it's paired with an appropriate wine. There are few hard and fast rules and experts concede that ultimately a perfect pairing is often a matter of personal preference.

Basic Guidelines

Creating contrasting or opposite flavors in a pairing is one approach. Salty cheeses and fruity wines can be great partners, keeping in mind to select similar strengths of each, such as a very salty cheese with a fruit-forward wine, and a moderately salty, semi-hard cheese with a wine that has more subdued fruit.

Often, cheese and wine pairing is based on similarities rather than contrasts. Match the flavor and texture by pairing delicate cheeses with light wines, robust cheeses with full-bodied wines and hard, mature cheeses with older wines.

Keep in mind that cheese coats the mouth and can dull the nuances of a delicate or complex wine and exaggerate tannins. Creamy cheeses are better partners with lighter style wines having soft tannins and crisp flavors.

Following are some guidelines that help bring these two delicious foods together as satisfying companions.

- *Pair simple cheeses with light wines.* Avoid overwhelming the young, mild cheeses with complex wines. Instead, choose wines that are light, crisp and mildly fruity like Sauvignon Blanc, Riesling, or fruity Rose.

- *Pair mild, aged cheeses with older, milder wines.* Cheese expert Laura Werlin notes in her book, *The All American Cheese and Wine Book*, that some cheeses and wines become rounded and mellow with age, allowing them to “find companionship because neither is interested in wrestling the other for attention.” Examples she cites are Aged Gouda and Syrah, and Cheddar and Cabernet Sauvignon.
- *Pair strong, pungent cheeses with sweet wines.* Cheeses with strong flavors can have textures that are smooth and buttery or crumbly and tangy. Match these full-flavored cheeses with a contrasting or sweet wine such as a Port or a late harvest Riesling.
- *White wines are more cheese friendly, across the board than reds.* Because white wines typically are acidic and fruity, they pair well with the saltiness in most cheeses. Red wines with juicy, soft fruit and acidity pair well with cheeses as long as the red wine is low in tannins. Werlin points out that cheese influences the flavor of wine much more than the reverse, and cheese can bring out or even create bitterness in wine. The main reason why white wines are more cheese-friendly is because white wines are not made with much oak, if any (except for some Chardonnays.) Red wines always have oak plus they have inherent tannins. That combination makes cheese and wine pairing more challenging, notes Werlin.
- *Dessert wines, which are sweet, pair well in contrast to the saltiness of cheese.* The rich sweetness of dessert wines makes them broadly compatible with pungent creamy cheeses and earthy, extra-strong hard cheeses. Blue cheese usually goes well with dessert wines. Werlin notes that contrasting pairings should be “equal and opposite.” That is, pair a mildly salty cheese with a mildly sweet wine and a highly salty cheese with a much sweeter-style wine.